

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + Refrain from automated querying Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

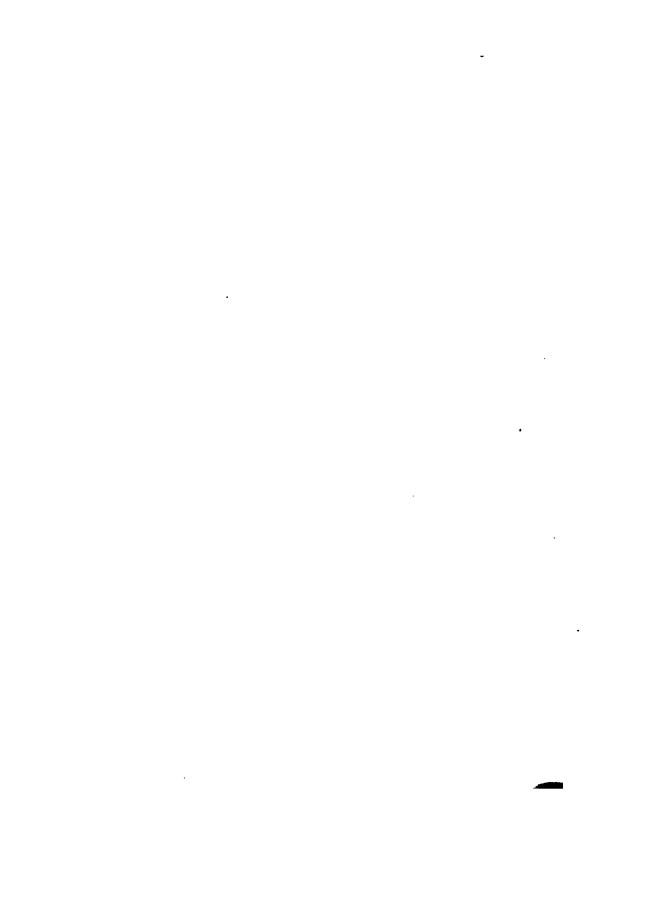
Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/



151. m. 31%.

•







THE

FUNCTIONS AND DISORDERS

OF THE

REPRODUCTIVE ORGANS

WORKS BY THE SAME AUTHOR.

A Practical Treatise on Diseases of the Urinary and Generative Organs (in both Sexes).—Part I. Non-Specific Diseases. Part II. Syphilis. Entirely Rewritten, with Copious Additions. Illustrated by Woodcuts and Coloured Plates. 3rd Edition. Octavo, £1 11s. 6d.

Prostitution, considered in its Moral, Social, and Sanitary Aspects, in London and other Large Cities; with Proposals for the Mitigation and Prevention of its Attendant Evils. 2nd Edition. Octavo, 12s.

THE

FUNCTIONS AND DISORDERS

OF THE

REPRODUCTIVE ORGANS

IN

Childhood, Youth, Adult Age, and Adbanced Life

CONSIDERED IN THEIR PHYSIOLOGICAL, SOCIAL, AND MORAL RELATIONS

BY WILLIAM ACTON, M.R.C.S.

LATE SUBGEOR TO THE ISLINGTON DISPENSABY, AND FORMERLY RETERMS TO THE VEHERSAL MUSPITALS, PARIS, PELLOW OF THE BOTAL MED. AND CHIR. SOCIETY, BTC. RTC.



SIXTH EDITION

LONDON

J. & A. CHURCHILL, NEW BURLINGTON STREET
1875

151. m. 317.

PREFACE

TO

THE SIXTH EDITION

In preparing the present edition I hope I may again conscientiously state that no time or labour has been spared in the endeavour to make the work more worthy of the continued favour the profession has shown it.

I have sought to investigate the subjects treated of in the calm and philosophic spirit in which all scientific inquiries should be approached, and have striven to keep the text free from any sentiment or expression incompatible with the dignity and the high calling of a medical man.

I would further add that I have not relied on my own observations only, but have quoted largely from the works of Carpenter, Lallemand, and Parise; preferring that they should share the responsibility of many statements which I could have established on my own experience. Hence I would fain hope that the professional reader, who takes up this work in a serious, thoughtful, and what I would term a loyal spirit, will not rise from its perusal without having derived considerable information. The continent student will find reasons for continuing to live according to the dictates of virtue. The dissolute will be taught, on positive and irrefragable grounds, the value of self-control. The bachelor, who is often placed in a trying social position, will glean consolation from observing that not only are his sexual sufferings recognised, but that rules are given him for their

mitigation. The married man will find advice and guidance, in order to avoid excesses. The surgeon will learn how to manage those difficult classes the hypochondriacal and the libertine. Lastly, the advocate who practises in the divorce or criminal courts will here find the basis for many valuable arguments,—nay more, he may learn how, in many cases of guilt, fair cause may be shown for a culprit's committal to a lunatic asylum instead of to a prison.

In conclusion, I would fain indulge the hope that the book may continue to exert, as I trust it has already exerted, some good practical influence upon public health and public morals.

17, Harley Street, Cavendish Square October, 1875.

TABLE OF CONTENTS

FIRST PERIOD—CHILDHOOD

IIIWI IMWIOD CHIMBHOOD
THE FUNCTIONS AND DISORDERS IN CHILDHOOD

PART I
NORMAL SEXUAL CONDITIONS IN CHILDHOOD . 1
PART II
ABNORMAL SEXUAL CONDITION IN CHILDHOOD
SEXUAL PRECOCITY

SECOND PERIOD—YOUTH
THE FUNCTIONS AND DISORDERS IN YOUTH
MATERIAL STREET, THE STREET, T
PART 1
NORMAL SEXUAL CONDITION IN YOUTH 9
You

$\mathbf{PART} \mathbf{\Pi}$	
ABNORMAL CONDITION IN YOUTH	PAGE
CHAPT. I.—INCONTINENCE	. 33
" II.—MASTURBATION	. 38
SECT. I.—MASTURBATION IN EARLY CHILDHOOD .	. 39
" II.—MASTURBATION IN THE YOUTH AND ADULT	. 54
,	. 62
" IV.—PHTHISIS ARISING FROM MASTURBATION .	. 68
" V.—Affections of the Heart arising from Mas	. 69
IUABATION ,	. 00
·	
THIRD PERIOD	
THE FUNCTIONS AND DISORDERS OF THE RE	PRO-
DUCTIVE ORGANS IN THE ADULT	
First B ivision	
GENERAL CONSIDERATIONS ON THE SEXUAL CONDITION THE ADULT	OF . 71
CHAPTER I—VIRILITY	. 74
• • • • • • • • • • • • • • • • • • • •	• • -
4	
Second Division	
#**** ****** * * * * * * * * * * * * *	
THE SEXUAL ACT, ITS PHYSIOLOGY AND DISORDERS	. 74
•	

CHAPTER I—ERECTION .	75
PART I	
NORMAL ERECTION, OR CONDITIONS ESSENTIAL TO IT .	po
NORMAL ENECTION, OR COMPILIONS ESSENTIAL TO IT.	. 70

	•
Contents	1X

PART II		
ABNORMAL ERECTION AND DISORDERS AFFECTING ERECTION		PAGE 82
SECT. I.—SLOW ERECTION		82
II.—Erection not lasting long enough		83
" III.—IMPERFECT ERECTION		83
" IV.—IRREGULAR ERROTION		86
V.—Non-Erection		86
" VI.—PRIAPISM, OR PERMANENT ERECTION		87
"VIL.—SATYRIASIS		89
- 		
CHAPTER II—EMISSION		
PART I		
NORMAL EMISSION; CONDITIONS ESSENTIAL TO IT		91
PART II		
DISORDERS AFFECTING EMISSION .		97
SECT. I.—PREMATURE EJACULATION		100
		102
		105
" IV.—DIURNAL POLLUTIONS OR EMISSIONS		116

CHAPTER III—THE EMITTED FLUID SEMEN		122
PART I		
NORMAL CONDITION OF THE SEMEN .		122
PART II		
DISORDERS AFFECTING THE SEMEN .		131
SECT. I.—INFECUND SEMEN		131
		138
" III.—Sexual suppering in the Married		141
" IV.—DISAPPOINTMENT IN LOVE		143
•		144
" VI.—Spermatorrhæa		145
FALSE SPERMATORBHŒA	•	171
CHAPTER IV—SEXUAL INTERCOURSE	•	178
CHAPTER V-marital excesses .		191

CIT A DATE DO TITE	'age 195
——	เลอ
CHAPTER VII	
EARLY BETROTHALS-LONG ENGAGEMENTS . :	198
· ·	
Third Mivision	
IMPOTENCE	200
SECT. I.—SEXUAL INDIFFERENCE, OR TEMPORARY ABSENCE OF DESIRE " II.—True Permanent Impotence, or Absence of Virility . " III.—Sterility	203 222 230
NULLITY OF MARRIAGE	234
<u> </u>	
FOURTH PERIOD—ADVANCED LIFE	
THE FUNCTIONS AND DISORDERS OF THE REPR DUCTIVE ORGANS IN ADVANCED LIFE . 2	O- 249
PART I	
NORMAL FUNCTIONS IN ADVANCED LIFE	24 9
PART II	
DISORDERS IN ADVANCED LIFE	254
CHAPT. I.—FUNCTIONAL DISORDERS IN PERSONS WHO DO NOT KNOW THE CONSEQUENCES OF REPEATED ACTS OF SEXUAL INTERCOURSE, AND COMMIT EXCESSES FROM IGNORANCE , II.—FUNCTIONAL DISORDERS IN PERSONS WHO KNOW THE CONSE- QUENCES OF SEXUAL EXCESSES, BUT CANNOT CONTROL THRIB PASSIONS	255 260
,, III.—FUNCTIONAL DISORDERS IN DÉBAUCHÉS WHO, HOPING TO SUPPLY THE LOSS OF POWER CONSEQUENT ON THEIR PRE- VIOUS EXCESSES, PREFER TO STIMULATE THE REPRODUCTIVE ORGANS FOR THE PURPOSE OF GRATIFYING THEIR ANIMAL	200
Passions	261
	201

INTRODUCTION

I have in the following pages treated of the Functions and Disorders, as distinguished from the Anatomy and Pathology, of the reproductive organs. On the latter topics there are many excellent and exhaustive works, but the former still need much elucidation. Until lately, indeed, many standard surgical writers on the generative 1 system have practically ignored the functional aspect of their subject; dealing with the whole of the wonderful and complex machinery of which they treat, as if the offices it fulfils, the thousand feelings it affects, the countless social, moral, and scientific interests with which it is so intimately connected, were of little or no moment.

A different, and I trust, healthier feeling has arisen since the first edition of this book was published; and I think I need not here repeat the apology or defence with which the earlier editions were prefaced.

I have laid under contribution the domains of Natural History and Comparative Anatomy, with the illustrative treasures of the College of Surgeons' Museum, the Veterinary College, and the Zoological Gardens, and have, moreover, availed myself of the experience of practical breeders of stock.

I have again followed in this edition the natural division of the subject, and have considered it under the four main periods of— Childhood—Youth—Adult Age—and Advanced Life. Taking

¹ In the following pages the words "generative," "sexual," "reproductive," will be used synonymously; there are some instances in which distinctions may be made between them, but these are so slight I need not further allude to them.

each period separately, I have first discussed the normal Functions or Conditions of the reproductive organs incidental to it. Having fully explained these by the help of the most recent physiological investigations, I have examined the Disorders to which each period is most subject. I venture to hope that scarcely a single ailment to which the generative functions are liable has escaped notice. To each it will be found that I have at least indicated the appropriate treatment.

FIRST PERIOD—CHILDHOOD

THE FUNCTIONS AND DISORDERS IN CHILDHOOD

PART I

NORMAL SEXUAL CONDITION IN CHILDHOOD

Any preliminary detailed analysis of the anatomy of the reproductive organs would be foreign to the purposes of the present treatise; a few words as to their relative size and appearance at different periods of life at the outset of our inquiry will suffice. In childhood the penis is naturally small, with the foreskin pointed, and not only completely covering the glans, but even extending beyond it. The attempt to uncover the glans is attended with difficulty in consequence of the existence of a natural phymosis, and similarly the process of recovering the glans owing to a natural paraphymosis, cannot be accomplished without resort to a certain degree of violence.

The mucous membrane is soft and flaccid, and (in a healthy constitution) free from the secretion called smegma by which it is covered in after life.

With sensitive children the withdrawal of the prepuce appears to promote erection, and to induce a gradual increase in the size of the penis, and such withdrawal is in all cases so far as possible to be avoided. In childhood the testes are small and flaccid, often pendent, and not sensitive to the touch. Such briefly described are the external appearance and general characteristics of the reproductive organs during childhood. We may now turn our attention to their functions. Previously to the attainment of puberty the normal condition of a healthy child is one of entire freedom from sexual impressions.

All its vital energy is employed in constructing the growing frame, in storing up external impressions, and in educating the brain to

P

receive them. During a well-regulated childhood, and in the case of ordinary temperaments, there is no temptation to infringe this primary law of nature. The sexes, it is true, in most English homes, are allowed unrestricted companionship, and experience shows that this intimacy is in the main unattended with evil results. In the immense majority of instances, indeed, it is of great benefit. However this may be, at a very early age the pastimes of the girl and boy diverge. The boy takes to more boisterous amusements, and affects the society of boys older than himself, simply because they make rougher, or, in his opinion, manlier playfellows. The quieter games of girls are despised, and their society is to a considerable extent deserted. This apparent rudeness, often grieved over by anxious parents, may almost be regarded as a provision of nature against possible danger.

Education, of course, still further separates children as they grow into boys and girls; and the instinctive and powerful check of natural modesty is an additional safeguard. Thus it happens that with most healthy and well brought up children no sensual idea or feeling has ever entered their heads, even in the way of speculation. I believe that such children's curiosity is seldom excited on these subjects except as the result of suggestion by persons older than themselves. At any rate in healthy subjects and especially in children brought up in the pure air and amid the simple amusements of the country, perfect freedom from, and indeed total ignorance of any sexual attraction is the rule. The first and only feeling exhibited between the sexes in the young should be that pure fraternal and sisterly affection which it is the glory and blessing of our simple English home habits to create and foster with all their softening influences on the after life.

This state of purity and ignorant innocence in children is not in any way unnatural. It is true that a different rule prevails among many of the lower animals. For instance, no one can have seen young lambs gambolling together without noticing at what an early age the young rams evince the most definite sexual propensities. Precocity in them is evidently intuitive, as it cannot depend on the force of example. This contrast between children and young animals may be explained by the fact that the animal's life is much shorter than that of man, its growth is more rapid, its office in the world is lower and more material, its maturity is sooner reached, and sexual propensities are therefore naturally exhibited at a much earlier age. In still lower forms of life sexual feeling commences yet earlier. In many species of moths no sooner is the perfect insect produced than it proceeds at once to the exercise of the function of procreation, which completed, its own existence ceases.

Very different should be the case with the human being, who needs

all the strength and all the nutrition he can command for the gradual development and consolidation of his more slowly maturing body and mind. The full development of the physical frame should precede reproduction. This applies to both sexes alike.

PART II

ABNORMAL SEXUAL CONDITION IN CHILDHOOD

SEXUAL PRECOCITY

It were well if the child's reproductive organs always remained in a quiescent state till puberty. This is unfortunately not the case.

Amongst the earliest disorders that we notice is sexual precocity.

In many instances, either from hereditary predisposition, bad companionship, or other evil influences, sexual feelings become developed at a very early age, and this abnormal excitement is always attended with injurious, often with the most deplorable consequences. Slight signs are sufficient to indicate when a boy otherwise apparently healthy, and fond of playing with other boys, has this unfortunate tendency. He shows undoubted preferences. He will single out some one particular girl, and evidently derive a more than boyish pleasure from her society. His penchant does not take the ordinary form of a boy's good nature, but little attentions that are generally reserved for a later period prove that his feelings are different from the ordinary standard and sadly premature. His play with the girl is different from his play with his brothers. His kindness to her is too ardent. He follows her he knows not why. He fondles her with tenderness painfully suggestive of a vague dawning of passion. No one can find fault with him. He does nothing wrong. Parents and friends are delighted at his gentleness and politeness, and not a little amused at the traces of early flirtation. If they were wise they would rather feel profound anxiety; and he would be an unfaithful or incompetent medical adviser who did not, if an opportunity occurred, warn them that such a boy ought to be carefully watched, and removed from every influence calculated to foster his abnormal propensities.

The premature development of the sexual inclination is not merely repugnant to all we associate with the term childhood, but is also fraught with danger to dawning manhood. On the judicious treatment of a case such as has been sketched, it probably depends whether the dangerous propensity shall be so kept in check as to preserve the boy's health and innocence, or whether one more shattered constitution

and wounded conscience shall be added to the victims of sexual precocity and careless training. It ought not to be forgotten that in such cases a quasi-sexual power often accompanies these premature sexual inclinations. Few, perhaps, except medical men, know how early in life a mere infant may experience erections. Frequently it may be noticed that a little child, on being taken out of bed in the morning, cannot make water at once. It would be as well if it were recognised by parents and nurses that this often depends upon a more or less complete erection.

Predisposing Causes.—What the cause of this early sexual predisposition in a young child may be, it is difficult to lay down with certainty in any given case. My own belief is, that there are sexual predisposing causes. I should specify hereditary predisposition as by no means the least common. It cannot be denied that as children soon after birth inherit a peculiar conformation of features or frame from the parent, so they frequently evince, even in the earlier years of childhood, mental characteristics and peculiarities that nothing but hereditary predisposition can account for. I believe that, as in body and mind, so also in the passions, the predispositions of the father are frequently inherited by the children. No man or woman can inordinately indulge their own sexual passions without at least running the risk of finding a disposition to gratify their sensual passions at an early age inherited by their offspring. way only can we explain the existence in generation after generation of an early and apparently almost irresistible propensity to similar tastes and feelings. No doubt vicious tendencies are frequently, perhaps most frequently acquired. But I firmly believe that moral as well as physical tendencies and irregularities can be transmitted to the progeny.

EXCITING CAUSES.—There are, however, not a few directly exciting causes which can, and do frequently, not only foster this early proclivity to sexual feeling when there is hereditary predisposition, but even of themselves alone beget it.

We see in some children at a very early age an almost ungovernable disposition to touch or excite the sexual organs. This most dangerous habit is not unfrequently, I believe, produced by irritation in the rectum arising from worms. In other instances it arises from excessive irritability of the bladder. In addition to the manipulation another symptom often supervenes, viz., the constant wetting of the bed at night.

There is, besides, in many young persons, as will be mentioned hereafter (p. 32), a morbid sensibility of the external organs that is excessively troublesome and often painful. This symptom may, I believe, appear very early in life, and, if not removed, lead to consequences

that will be aggravated by youthful ignorance and want of self-control. It is to be wished that all medical men attached to large institutions where young boys are collected would bear this in mind, and when they have reason to suspect its existence remedy it at once. However natural the delicacy they feel in investigating such ailments, yet in this, perhaps above all other evils, prevention is better than cure.

Irritation of the glans penis arising from an unusually long prepuce or the collection of secretion under it is another exciting cause which should not be neglected. Since my attention was first called to this subject I have had abundant evidence that the influence of a long prepuce in producing sexual precocity has not been sufficiently noted. In the child the prepuce usually, as stated at p. 1, entirely covers the glans penis, and when, as generally happens in early life, smegma is not secreted, no ill consequences arise, but in some cases the urine lodges behind the prepuce and (especially if it becomes acrid) produces irritation which accordingly requires local treatment. A judicious mother or nurse should on observing any redness, swelling, or peculiar appearance call the attention of the surgeon to the case, as when taken in time the treatment is very simple and efficacious.

I do not recommend that the child under normal conditions should be advised, like the adult, to draw back the prepuce and employ ablution daily, but in all cases where the smegma is secreted early, daily ablutions are indispensable. As the boy grows older careful ablution of the glans and prepuce every morning will be beneficial, and if it is neglected, annoyance will be experienced, especially by those who have a long prepuce, from the collection of the secretion round the glans penis; but it should be remembered that this white secretion is natural, and not a symptom of disease. Quacks have frequently so wrought upon the fears of ignorant patients, especially those whose consciences were not clear, as to induce them to think they were labouring under some peculiar affection, whereas a little soap and water would have acted as a sufficient remedy.

A long and narrow prepuce is, in my opinion, a much more common cause of the subsequent contraction of evil habits than parents or medical men have any idea of. The collection of smegma between the glans and the prepuce is almost certain to produce irritation.

PREVENTIVE TREATMENT.—The first point to be observed will already have suggested itself—cleanliness. Yet I have never heard of any steps being taken by those having the care of youth to induce boys to adopt precautionary methods. Children are educated to remove secretions from every other part of their bodies (where they are of less importance in their consequences than these are here), but probably a nurse, parent, schoolmaster, or even doctor, would be somewhat

astonished at its being proposed that a boy of twelve should be told (for if not told he will never do it) to draw back the prepuce and thoroughly cleanse the glans penis every day in his bath. In my own experience of the treatment of children I have found this practice so beneficial, that I never hesitate to recommend it in any case where there is the least symptom of local irritation.

The only objection which can be suggested to recommending thorough cleanliness in early childhood is the supposed risk of teaching the boy to practise manipulations which may tend to excite sexual desires.

This vague alarm that we must not allude to these sexual matters because some ill consequences may arise has no longer any influence on me. I am fully convinced from the acknowledgments of patients that the course I suggest will not be accompanied by the risk above referred to. Even if the dreaded evil should arise, and the carrying out of advice was followed by any morbid sensations, the boy who had received such recommendation would go to his adviser and state the consequences, in the full assurance that he would receive sympathy and any further advice that might be necessary. I am convinced of the fact that when any irritation or derangement exists, if the proper steps (of which cleanliness is the most effectual) are not taken to check it, the child will in ignorance handle or rub the organs, and the dangers arising in this way are much greater than any to be apprehended as indirectly arising from mere ablution, especially in cold water.

The shock of cold water falling on the organs in susceptible people is most beneficial. In subsequent pages, see p. 53, we shall see that this treatment will often by itself suffice to cure the irritability that occasionally is noticed in the reproductive organs, and which produces, if unremoved, much mental and sexual suffering.

Nothing of course can be more important than carefully to guard against unnecessary irritation from whatever cause. Children should be early cautioned against playing with the external organs. Without giving any reason, they may be desired to keep their hands away, which will in most cases be sufficient, if there is no physical exciting cause. The slightest symptom, however, of the existence of any such cause should never be neglected. If, for instance, a child wets his bed,—which is generally almost the first indication the parents have of the presence of irritation,—the organ should be examined, and the boy's other habits watched. The irritation of the bladder is only too likely to determine blood to the part, and the unpleasant symptoms, moreover, show a nervous susceptible temperament, which always requires careful watching.

A few practical hints may here be added for the benefit of those who have not had much experience in the treatment of children. If

the prepuce comes back readily all well and good, but if (especially in boyhood) it is retracted with difficulty, the introduction of dry lint between the glans and prepuce will suffice to stretch the latter and the lint may be gradually increased in thickness. If there is paraphymosis, division of the few threads which cause contraction of the prepuce, and keeping it drawn back for a few days by covering it with dry lint, will usually suffice. I have by using these precautions in many instances been able to dispense with circumcision, which would have been otherwise necessary—an operation that I always avoid, if possible, especially in young children.

It has been, indeed, suggested by some persons that the universal performance of circumcision would be of no small benefit. This, however, can be only a speculation. Circumcision is never likely to be introduced amongst us, and there is no doubt that the abovementioned precautions will suffice in most cases to remove all ill effects arising from the existence of a long and narrow prepuce or from the retention of the prepuce.¹

If in the young human being the existence of the foreskin may produce the above evil consequences, later in life we shall see that its presence or absence may lead to most important consequences, particularly when speaking of impotence (see that chapter).

Several confessions that have been made to me induce the suggestion for the consideration of parents and schoolmasters, whether the practice of climbing in gymnasia is not open in some degree to objections. The muscles chiefly called into action in climbing, are those, the excessive exertion of which tends to excite sexual feelings. Boys have, as I know, sometimes discovered this, for more than one adult has told me that, when at school, he had found that he derived pleasure from the exercise, and had repeated it quite in ignorance of the consequences.

Those who will refer to p. 30 will not suspect me of undervaluing athletic exercises, but if this particular one has the effect I have described, I should certainly advise its discontinuance.

Persons having the care of children cannot too constantly bear in mind that the tendency of all irritation or excitement of the generative system, either mental or physical, is to induce even the youngest

¹ In a state of nature the foreskin serves as a complete protection to the glans penis; nevertheless, to the sensitive, excitable, civilised individual, the prepuce often becomes a source of serious mischief. In warm climates, the collection of the secretions between it and the glans is likely to cause irritation and its consequences; and this danger was probably the origin of circumcision. The existence of the foreskin predisposes to exaggerate the effects of syphilis, and I am fully convinced that the excessive sensibility induced by a narrow foreskin, and the difficulty of drawing back the prepuce, is often the cause of emissions, musturbation, or undue excitement of the sexual desires.

child to stimulate the awakened appetite, and attempt to gratify the immature sexual desires which would otherwise have remained dormant for years to come. In a state so artificial as that of our modern civilisation the children of the upper classes are sadly open to this temptation. An enervated sickly refinement tells directly on the children that are at once its offspring and its victims, begetting precocious desires, too often gratified, and giving rise to the meanest and most debasing of all vices. The melancholy and repulsive habit of masturbation, so degrading and debilitating to the child, and so injurious in its effect on the after life, will be fully discussed in a later chapter (p. 38).

SECOND PERIOD—YOUTH

THE FUNCTIONS AND DISORDERS IN YOUTH

PART I

NORMAL SEXUAL CONDITION IN YOUTH

Youth (by which we mean that portion of a man's earthly existence during which he is growing—that is, in which he has not yet attained his maximum of mental and physical stature and strength) is, as regards the reproductive functions, to be divided into two periods. The line of demarcation is the occurrence of that series of phenomena which constitute what we call puberty. During the first of these two periods, or childhood, strictly so termed, the fitting condition is, as we have seen in the last chapter, absolute sexual quiescence.

In the second period, or that of youth, which we now purpose to consider quiescence wakes into all the excitement of the most animated life—a spring season, so to speak, like that so brilliantly sketched by our great poet:

"In the spring a fuller crimson comes upon the robin's breast,
In the spring the wanton lapwing gets himself another crest,
In the spring a livelier iris changes in the burnished dove,
In the spring a young man's fancy lightly turns to thoughts of love."

Of the real nature of this new condition, of its temptations, of the incalculable advantages of resisting them, and of the means of doing so, it is now my purpose to speak, as plainly and concisely as possible.

Dr. Carpenter thus describes the change from childhood to youth:

"The period of youth is distinguished by that advance in the evolution of the generative apparatus in both sexes, and by that acquirement of its power of functional activity, which constitutes the state of PUBERTY. At this epoch a considerable change takes place in the bodily constitution: the sexual organs undergo a much increased

development; various parts of the surface, especially the chin and the pubes, become covered with hair; the larynx enlarges, and the voice becomes lower in pitch, as well as rougher and more powerful; and new feelings and desires are awakened in the mind."

"To the use of the sexual organs for the continuance of his race Man is prompted by a powerful instinctive desire, which he shares with the lower animals. This instinct, like the other propensities, is excited by sensations; and these may either originate in the sexual organs themselves or may be excited through the organs of special sense. Thus in man it is most powerfully aroused by impressions conveyed through the sight or touch, but in many other animals the auditory and olfactory organs communicate impressions which have an equal power, and it is not improbable that in certain morbidly excited states of feeling the same may be the case with ourselves."—Carpenter's Physiology, 7th edition, p. 825.

With this bodily and mental change or development special functions, hitherto quiescent, begin their operations. Of these the most important in the male is the secretion of the impregnating fluid, the semen.

"From the moment," says Lallemand, "that the evolution of the generative organs commences (the testicles act), if the texture is not accidentally destroyed, they will continue to secrete up to a very advanced age. It is true that the secretion may be diminished by the absence of all excitement, direct or indirect, by the momentary feebleness of the economy, or by the action of special medicines, but it never entirely ceases from puberty up to old age." ("Les Pertes Seminales," p. 240, vol. ii.)

And now begins the trial which every healthy youth has to encounter, and from which he must come out victorious if he is to be all that he can and ought to be. The child should know nothing of this trial, and ought never to be disturbed with one sexual feeling or thought. But with puberty a very different state of things arises. A new power demands to be exercised, a new want to be satisfied. It is, I take it, of vital importance that boys and young men should know, not only the guilt of an illicit indulgence of their dawning passions, but also the danger of straining an immature power, and the solemn truth that the want will be an irresistible tyrant only to those who have lent it strength by yielding; that the only true safety lies in keeping even the thoughts pure. Nothing, I feel convinced, but a frank statement of the truth will persuade those entering upon puberty that these new feelings, powers, and delights must not be indulged.

It is very well known to medical men that the healthy secretion of semen has a direct effect upon the whole physical and mental conformation of the man. A series of phenomena attend the natural action of the testicles influencing the whole system; helping, in fact, in no

small degree, to form the character itself. A function so important, which, in truth, to a great extent determines, according as it is dealt with, the happiness or misery of a life, is surely one of the last, if not the very last, that should be abused (see chapter on Semen).

But what, too often, are the facts? The youth, finding himself in possession of these sexual feelings and powers, utterly ignorant of their importance or even of their nature, except from the ribald conversation of the worst of his companions, and knowing absolutely nothing of the consequences of giving way to them, fancies—as he, with many compunctions, begins a career of depravity—that he is obeying nature's dictates. Every fresh indulgence helps to forge the chains of habit; and it too often happens in consequence of the morbid depression to which these errors have reduced him, that he fancies that he is more or less ruined for this world, that he can never be what he might have been, and that it is only by a struggle as for life or death that he can hope for any recovery. In too many instances there is no strength left for any such struggle, and, hopelessly and helplessly, the victim drifts into irremediable ruin, tied and bound in the chain of a sin with the commencement of which, ignorance had as much to do as vice.

Not that this natural instinct is to be regarded with a Manichman philosophy as in itself bad. Far from it. That it is natural forbids such a theory. It has its own beneficent purpose; but that purpose is not early and sensual indulgence, but mature and lawful love. Let us hear what Carpenter eloquently says on this point:

"The instinct of reproduction, when once aroused, even though very obscurely felt, acts in man upon his mental faculties and moral feelings, and thus becomes the source, though almost unconsciously so to the individual, of the tendency to form that kind of attachment towards one of the opposite sex which is known as love. This tendency, except in men who have degraded themselves to the level of brutes, is not merely an appetite or emotion, since it is the result of the combined operations of the reason, the imagination, the moral feelings, and the physical desire. It is just in this connection of the psychical attachment with the more corporeal instinct that the difference between the sexual relations of man and those of the lower animals lies. In proportion as the human being makes the temporary gratification of the mere sexual appetite his chief object, and overlooks the happiness arising from mental and spiritual communion, which is not only purer but more permanent, and of which a renewal may be anticipated in another world, does he degrade himself to a level with the brutes that perish."—Carpenter's Physiology, 7th edition, p. 826.

Shakespeare makes even Iago say—

[&]quot;If the balance of our lives had not one scale of reason to poise another of sen-

suality, the blood and baseness of our natures would conduct us to most preposterous conclusions; but we have reason to cool our raging motions, our carnal stings, our unbitted lusts."—Othello.

"Nuptial love," says Lord Bacon, "maketh mankind, friendly love perfecteth it, but wanton love corrupteth and embaseth it."

Here, then, is our problem. A natural instinct, a great longing, has arisen in a boy's heart, together with the advent of the powers requisite to procure its gratification. Everything—the habits of the world, the keen appetite of youth for all that is new—the example of companions—the pride of health and strength—opportunity—all combine to urge him to give the rein to what seems a natural propensity. Such indulgence is, indeed, not natural, for man is not a mere animal, and the nobler parts of his nature cry out against the violation of their sanctity. Nay more, such indulgence is fatal. It may be repented of. Some of its consequences may be, more or less, recovered from. But, from Solomon's time to ours, it is true that it leads to a "house of death."

The boy, however, does not know all this. He has to learn that to his immature frame every sexual indulgence is unmitigated evil. It does not occur to his inexperienced mind and heart that every illicit pleasure is a degradation, to be bitterly regretted hereafter—a link in a chain that does not need many more to be too strong to break.

"Amare et sapere vix Deo conceditur," said the ancients. It is my object, nevertheless, to point out how the two can be combined—how, in spite of all temptations, the boy can be at once loving and wise, and grow into what indeed, I think, is one of the noblest objects in the world in these our days,—a continent man.

CONTINENCE

In the following pages the word "continence" will be used in the sense of voluntary and entire forbearance from sexual excitement or indulgences in any form.

The abstinence must be voluntary, for continence must not be confounded with impotence. An impotent man is continent in a sense, but his continence, not depending on any effort of the will, is not what we are now speaking of.

Nor is the continence—which I advise, and would encourage by every means in my power—mere absence of desire arising from ignorance. That, as I shall hereafter show, p. 20, I consider a dangerous condition. True continence is complete control over the passions, exercised by one who has felt their power, and who, were it not for his steady will, not only could, but would indulge them.

Again, continence must be entire. The fact of the indulgence being lawful or unlawful does not affect the question of continence. In this respect our definition differs from those in most dictionaries.

This definition, of course, excludes the masturbator from the category of continent men, even though he may never have had connexion with a female. It can be only in a loose and inaccurate sense that an Onanist can be called continent. He is not really so. Continence consists not only in abstaining from sexual congress, but in controlling all sexual excitement. If a young man gives way to masturbation it is easy enough, as will be presently shown, for him to abstain from fornication. In fact, the one indulgence is generally incompatible with the other.

We may confidently assert that no man is entitled to the character of being continent or chaste who by any unnatural means causes expulsion of semen. On the other hand, the occasional occurrence of nocturnal emissions or wet dreams is quite compatible with, and, indeed, is to be expected as a consequence of continence, whether temporary or permanent. It is in this way that nature provides relief.

Professor Newman in his pamphlet on the relation of physiology to sexual morals has some excellent observations on this subject, which I generally coincide in, and which I prefer to quote rather than attempt to epitomise.

"Moralists have at all times regarded strict temperance in food, and abstinence from strong drinks, to be of cardinal value in the maintenance of young men's purity. But whatever our care to be temperate, whatever our activity of body, it is not possible always to keep the exact balance between supply and bodily need. Every organ is liable occasionally to be overcharged, and, in every youthful or vigorous nature, has power to relieve itself. Considering that in man the sexual appetite is not, as in wild animals, something which comes for only a short season, and then imperatively demands gratification, but on the contrary is perennial, constant, and yet is not necessarily to be exercised at all, his nature cannot be harmonious and happy, unless it can right itself under smaller derangements of balance. But this is precisely what it does; and I cannot but think it of extreme importance not to allow a bugbear to be made out of that, which on the face of the matter is God's provision that the unmarried man shall not be

¹ The following are one or two of the definitions of the word "continence" in standard works:

[&]quot;Abstinence from, or moderation in, the pleasures of physical love."—R. Dunglison, M.D.

[&]quot;The abstaining from unlawful pleasures."—Bailey.

[&]quot;Forbearance of lawful pleasure."—Ash.

harmed by perfect chastity. That it is ever other than natural, normal, and beneficial, I never heard or dreamed until I was well past the age of fifty. The Roman poet Lucretius, in a medico-philosophical discussion, speaks of this matter quite plainly, and treats it as universal to mankind: iv, 1024-1045. He imputes it to strength and youthful maturity, not to weakness; and while his description is tinged with epic extravagance, the thought of its doing any one harm evidently does not cross his mind, much less that it is an evil effect and disgraceful stain from previous vice. Now that I learn so many medical men to be unacquainted with it except as something immoderate, and, thereby, depressing and dangerous,-morbid and alarming; I have thought it a duty to make inquiries, where I could properly do so, from persons of whose true purity from early life I am thoroughly persuaded; and all that I elicit, direct or indirect, confirms me in what I have all my life believed. A clergyman reminds me that the ceremonial regulations in the books of Moses count upon it, and so does Jeremy Taylor;—dates, countries and races (says he) distant enough: he adds his belief that it is perfectly healthful, and tends to be nearly periodical. A traveller to Jerusalem tells me that he found one of the superior monks 'unclean' for the day on account of it; and an inferior monk alluded to it as an ordinary matter. On gathering up what I know, what I have read, and what I believe on testimony, I distinctly assert, first, that this occurrence is strictly 'spontaneous,'—that it comes upon youths who not only have never practised, but have never heard of such a thing as secret vice: that it comes on, without having been induced by any voluntary act of the person, and without any previous mental inflammation: next, that it occasionally comes upon married men, when circumstances put them for long together in the position of the unmarried; moreover, even when they become elderly, it does not wholly forsake them under such circumstances. My belief is that it is a sign of vigour. At any rate I assert most positively that it is an utter mistake to suppose that it necessarily weakens or depresses, or entails any disagreeable afterresults whatever. I have never so much as once in my life had reason to think so. I have even believed that it adds to the spring of the body, and to the pride of manhood in youths. Of course there is an amount of starvation (at least I assume there is) which would supersede it; but to overdo the starvation even a little, may be an error on the wrong side.—Again, there is probably an amount of athletic practice which will take up all the supplies of full nutriment in the intensifying of muscle or of vital force, and leave no sexual superfluity. But labour so severe is stupefying to the brain and very unfavorable to high mental action. Plato is not alone in regarding athletes as unintellectual. Aristotle deprecates their system of 'overfeeding and overworking.' And after all, you will not succeed in exactly keeping the balance, whether you try by starvation or by toil; and the over careful effort will but produce either a valetudinarian, or else a religious ascetic, who is in terrible alarm lest Nature inflict upon him a momentary animal pleasure. A state of anxiety and tremor is not mentally wholesome. We must take things as they come, observing broad rules of moderation as wisely as we can, but without nervous alarm about details. The advantages of vegetarian food I have learned only late in life. I now know that I might have been wiser in my diet. With better knowledge I should have done far better as to the quality of food; but I do not easily believe that a more scrupulous dread of satisfying my appetite lest it cause some small sexual superfluity would have conduced either to mental or to bodily health, at any time of my life, unmarried or married."—Loc. cit., p. 26.

Voluntary imitation or excitement of this natural relief is, in every sense of the word, incontinence. I would exclude from the category of continent men those (and they are more numerous than may be generally supposed) who actually forbear from sexual intercourse, but put no restraint upon impure thoughts or the indulgence of sexual excitement, provided intercourse does not follow. This is only physical continence: it is incomplete without mental continence also.

Such men as these, supposing the sexual excitement is followed by nocturnal emissions, as it often is, and this with great detriment to the nervous system, must not be ranked with the continents; to all intents and purposes they are Onanists. The subject will be further discussed in the section "On ungratified sexual excitement."

The advantages of Continence.—If a healthy, well-disposed boy has been properly educated, by the time he arrives at the age of fourteen or sixteen he possesses a frame approaching its full vigour. His conscience is unburdened, his intellect clear, his address frank and candid, his memory good, his spirits are buoyant, his complexion is bright. Every function of the body is well performed, and no fatigue is felt after moderate exertion. The youth evinces that elasticity of body and that happy control of himself and his feelings which are indicative of the robust health and absence of care which should accompany youth. His whole time is given up to his studies and amusements, and as he feels his stature increase and his intellect enlarge, he gladly prepares for his coming struggle with the world.

If, then, the above are the advantages of continence, let us now glance at the reverse of the picture hereafter more fully considered, and notice the symptoms when a boy has been incontinent, especially in that most vicious of all ways, masturbation. In extreme cases the outward signs of debasement are only too obvious. The frame is

stunted and weak, the muscles undeveloped, the eye is sunken and heavy, the complexion is sallow, pasty, or covered with spots of acne, the hands are damp and cold, and the skin moist. The boy shuns the society of others, creeps about alone, joins with repugnance in the amusements of his schoolfellows. He cannot look any one in the face, and becomes careless in dress and uncleanly in person. His intellect becomes sluggish and enfeebled, and if his evil habits are persisted in, he may end in becoming a drivelling idiot or a peevish valetudinarian. Such boys are to be seen in all the stages of degeneration, but what we have described is but the result towards which they all are tending.

The cause of the difference between these cases is very simple. The continent boy has not expended that vital fluid, semen, or exhausted his nervous energy, on the contrary, his vigour has been employed for its legitimate purpose, namely, in building up his growing frame. On the other hand, the wear and tear of the nervous system arising from the incessant excitement of sexual thoughts, the constant strain on the nervous system, and the large expenditure of semen, has exhausted the vital force of the incontinent, and has reduced the immature frame to a pitiable wreck.

DIFFICULTY OF MAINTAINING.—An almost infinite variety of opinion exists on this subject, between the extreme proposition on the one hand, that a young man has, or need have no sexual desire, at least to any troublesome degree, and consequently need neither take precautions, nor be warned against the danger of exciting his sexual feelings, and the equally extreme doctrine on the other hand, that the sufferings of chastity are such as to justify, or at least excuse, incontinence. My own opinion is, that where, as in the case with a very large number, a young man's education has been properly watched, and his mind has not been debased by vile practices, it is usually a comparatively easy task to be continent, and requires no great or extraordinary effort; and every year of voluntary chastity renders the task easier by the mere force of habit.

Yet it can hardly be denied that a very considerable number, even of the more or less pure, do suffer, at least temporarily, no little distress.

Lallemand has given a vivid sketch of this sexual uneasiness, which the early recollections of many of my readers may verify. "There is a constant state of orgasm and erotic preoccupation, accompanied with agitation, disquiet, and malaise, an indefinable derangement of all the functions. This state of distress is seen particularly in young men who have arrived at puberty, and whose innocence has been preserved from any unfortunate initiation. Their disposition becomes soured, impatient, and sad. They fall into a state of melancholy or misan-

thropy, sometimes become disgusted with life, and are disposed to shed tears without any cause. They seek solitude in order to dream about the great mystery which absorbs them; about those great unknown passions which cause their blood to boil. They are at the same time restless and apathetic, agitated, and drowsy. Their head is in a state of fermentation, and nevertheless weighed down by a sort of habitual headache. A spontaneous emission or escape, which causes this state of plethora to cease, is a true and salutary crisis which for the moment re-establishes the equilibrium of the economy." (Vol. II, p. 324.)

I have quoted this passage, as containing a brilliant, though, perhaps, rather exaggerated sketch of a state of mind and body that is very common, and is the chief difficulty in the way of a youth's remaining chaste. I am, however, far from endorsing Lallemand's remark, that this distress affects those particularly "whose innocence has been preserved from any unfortunate initiations." contrary, it is my experience that these are just the persons who are, generally speaking, too happy and healthy to be troubled with these importunate weaknesses. The semi-continent, the men who indeed see the better course, and approve of it, but follow the worsethe men who, without any of the recklessness of the hardened sensualist, or any of the strength of the conscientiously pure man, endure at once the sufferings of self-denial and the remorse of self-indulgence—these are the men of whom Lallemand's words are a living description.

The facts which show the truth of this are innumerable, and apply to the youth, of whom I am now more particularly speaking, as much as to the adult. It is a matter of every-day experience to hear patients complaining that a state of continence after a certain time produces a most irritable condition of the nervous system, so that the individual is unable to settle his mind to anything:—study becomes impossible; the student cannot sit still; sedentary occupations are unbearable, and sexual ideas intrude perpetually on the patient's thoughts. When I listen to this complaint, I have little doubt of the confession that is to follow—a confession that at once explains the symptoms. in such cases I am prepared to learn that the self-prescribed remedy has been most effective, that sexual intercourse has enabled the student at once to recommence his labours, the poet his verses, and the faded imagination of the painter to resume its fervour and its brilliancy; while the writer who for days has not been able to construct two phrases that he considered readable, has found himself, after relief of the seminal vessels, in a condition to dictate his best performances. In individuals constituted as these are, continence is sure to induce this state of irritability. Still, no such symptoms, however feelingly described, should ever induce a medical man even to seem to sanction his patient's continuing the fatal remedy, which is only perpetuating the disease.

In all solemn earnestness I protest against a medical man countenancing such a remedy. It is better for a youth to live a continent life. The strictly continent suffer little or none of this irritability; but the incontinent, as soon as seminal plethora occurs, are sure to be troubled in one or other of the modes above spoken of; while the remedy of indulgence, if effective, requires repetition as often as the inconvenience returns. If instead of gratifying his inclinations the young patient should consult a conscientious medical man, he would probably be told, and the result would soon prove the correctness of the advice given, that low diet, partial abstinence from meat and stimulants, aperient medicine (if necessary), gymnastic exercise, and self-control, will most effectually relieve the symptoms. The patient might further be advised to adopt the precautions mentioned in the chapter on Nocturnal Emissions, which will tend to prevent a repetition of the plethora.

The truth is, that most people, and especially the young, are often only too glad to find an excuse for indulging their animal propensities, instead of endeavouring to regulate or control them. I have not a doubt that this sexual suffering is often much exaggerated, if not invented, for this purpose. Even where it really exists (and I am free to confess that in certain individuals continence of the sexual feelings is very difficult), one of the last remedies the patient would entertain the idea of, would be, that first recommended by a conscientious professional man, viz., attention to diet—exercise—and, in fact, regimen. That there should be more available and willing testimony in favour of the remedy considered agreeable than of that involving constraint or inconvenience, is easily explicable on the supposition that the witnesses have not had experience of both systems.

If a young man wished to undergo the acutest sexual suffering, he could adopt no more certain method than to propose to be incontinent, with the avowed intention of becoming continent again, when he had "sown his wild oats." The agony of breaking off a habit which so rapidly entwines itself with every fibre of the human frame is such that it would not be too much to say to any youth commencing a career of vice—"You are going a road on which you will never turn back. However much you may wish it, the struggle will be too much for you. You had better stop now. It is your last chance."

There is a terrible significance in the Wise Man's words, "None that go to her return again, neither take they hold on the paths of life."

How much more severe, occasional incontinence makes the necessary

struggle to remain continent at all, appears from the sexual distress which widowers, or those married men to whom access to their wives is forbidden, suffer.

To show that this is not the result of my experience alone, I may quote the statement of my friend Dr.---, who is constantly attending for serious diseases of the womb the wives of clergymen, as well as of dissenting ministers, in whose cases, for months together, marital intercourse is necessarily forbidden. He tells me that he has often been surprised at the amount of sexual suffering—the result of their compulsory celibacy—endured by the husbands of some of his patients men in every other relation of life most determined and energetic. Indeed, it is not wonderful that it should be so, if we consider the position of such men, who for years may have indulged, with moderation, the sex-passion as we have described it, untrained to mortification in the shape of food or exercise, or marital intercourse, the secretion of perfect semen going on in obedience to the healthy course of a married man's existence. Conceive them reined up suddenly, as it were, and bidden to do battle with their instincts. Religion and morality prevent them, more than others, from having sexual intercourse with strange women; intense ignorance on the subject of the sex-passion in general, as well as misapprehension of the effects of disease of the generative organs, only aggravate their suffering: conceive all this, and it is not difficult to believe that affections of the brain may supervene.

These remarks are in no way intended as any excuse or palliation for incontinence, but as warnings to the young. These, it must be remembered, are the complaints of incontinent men, and I mention them here to show how much easier it is even in adult life to abstain altogether than it is to control the feelings, when they have been once excited and indulged. The real remedy for this form of sexual distress is resolute continence and the use of all the hygienic aids in our power—not the empiric receipt of present indulgence with the futile intention of curing the incontinence afterwards.

The admitted fact that continence, even at the very beginning of manhood, is frequently productive of distress, is often a struggle hard to be borne,—still harder to be completely victorious in,—is not to be at all regarded as an argument that it is an evil. A thoughtful writer has on this subject some admirable remarks:—" Providence has seen it necessary to make very ample provision for the preservation and utmost possible extension of all species. The aim seems to diffuse existence as widely as possible, to fill up every vacant piece of space with some sentient being, to be a vehicle of enjoyment. Hence this passion is conferred in great force. But the relation between the number of beings and the means of supporting them is only on the

footing of a general law. There may be occasional discrepancy between the laws operating for the multiplication of individuals and the laws operating to supply them with the means of subsistence, and evils will be endured in consequence, even in our own highly favoured species; but against all these evils and against those numberless vexations which have arisen in all ages from the attachment of the sexes, place the vast amount of happiness which is derived from this source—the centre of the whole circle of the domestic affections, the sweetening principle of life, the prompter of all our most generous feelings and even of our most virtuous resolves and exertions—and every ill that can be traced to it is but as dust in the balance. And here also we must be on our guard against judging from what we see in the world at a particular era. As reason and the higher sentiments of man's nature increase in force, this passion is put under better regulation, so as to lessen many of the evils connected with it. The civilised man is more able to give it due control; his attachments are less the result of impulse; he studies more the weal of his partner and offspring. There are even some of the resentful feelings connected in early society with love, such as hatred of successful rivalry, and jealousy, which almost disappear in an advanced state of civilisation. The evil springing, in our own species at least, from this passion may, therefore, be an exception mainly peculiar to a particular term of the world's progress, and which may be expected to decrease greatly in amount."1

In addition to the foregoing considerations, I would venture to suggest one that should not be forgotten. Granted that continence is a trial, a sore trial, a bitter trial, if you will—what, I would ask, is the use or object of a trial but to try, to test, to elicit, strengthen and brace, whatever of sterling, whatever of valuable, there is in the thing tried? To yield at once—is this the right way to meet a trial? To lay down one's arms at the first threatening of conflict—is this a creditable escape from trial, to say no more? Nay, is it safe, when the trial is imposed by the highest possible authority?

"The first use," says the late Rev. F. Robertson, "a man makes of every power or talent given to him is a bad use. The first time a man ever uses a flail it is to the injury of his own head and of those who stand around him. The first time a child has a sharp-edged tool in his hand he cuts his finger. But this is no reason why he should not be ever taught to use a knife. The first use a man makes of his affections is to sensualise his spirit. Yet he cannot be ennobled except through those very affections. The first time a kingdom is put in possession of liberty the result is anarchy. The first time a man is put in possession of intellectual knowledge he is conscious of the

^{1 &#}x27;Vestiges of Creation,' tenth edition, p. 310.

approaches of sceptical feeling. But that is no proof that liberty is bad or that instruction should not be given. It is a law of our humanity that man must know both good and evil; he must know good through evil. There never was a principle but what triumphed through much evil; no man ever progressed to greatness and goodness but through great mistakes."

The argument in favour of the great mental, moral, and physical advantage of early continence does not want for high secular authority and countenance, as the recollection of the least learned reader will suggest in a moment. Let us be content here with the wise Greek,2 who, to the question when men should love, answered, "A young man, not yet; an old man, not at all;" and with the still wiser Englishman,3 who thus writes:—"You may observe that amongst all the great and worthy persons (whereof the memory remaineth, either ancient or recent) there is not one that hath been transported to the mad degree of love—which shows that great spirits and great business do keep out this weak passion. By how much the more ought men to beware of this passion, which loseth not only other things, but itself. As for the other losses, the poet's relation doth well figure them:— 'That he that preferred Helena quitted the gifts of Juno and Pallas:' for whosoever esteemeth too much of amorous affection, quitteth both riches and wisdom. . . . They do best who, if they cannot but admit love, yet make it keep quarter."

AIDS TO CONTINENCE.—Every wise man must feel that no help is to be despised in any part of the life-battle all have to fight. And in that struggle for purity, which is, at least for the young, the hardest part of it, what help to seek, and where and how to seek it, are no unimportant questions, and in a practical treatise well deserve a few words.

Religion.—Far above all other assistance must, of course, be placed the influence of religion—not the superstition of which the bitter poet speaks:

"Humana . . . cum vita jaceret In terris oppressa gravi sub religione,"

but that whose chiefest beatitude is promised to the "pure in heart."

Of the direct personal influence of religion upon the individual in this respect, it is not my purpose to speak here—the very nature of that influence is, in these days, the ground of too much and too fervid controversy. It is not, however, without interest to observe the different way in which the two great western divisions of the Christian Church treat the subject of continence.

Among modern Protestants, I cannot help feeling that there is, both in the spoken and written teaching of their authorised ministers, a

¹ Robertson's 'Discourses,' pages 87, 88.

[?] Thales. 3 Lord Bacon,

certain timorousness in dealing with the matter, which, however natural, almost gives the idea of a lack of sympathy with the arduous nature of the effort requisite to obey the commands that so urgently demand perfect purity from the consistent Christian.

It is much the same among the fathers of our Church. In those writings which are, from their antiquity—the wide assent they have commanded—the character and station of their authors—or from other causes, usually regarded as of authority among us, there is often a deficiency in frank and kindly discussion of the subject.

It was far from my intention, when I commenced this work, to put myself forward as a religious adviser, but I so frequently receive painful letters from young men, seeking advice how to curb the lusts of the flesh, that I was induced to inquire as to the views entertained upon the subject by the modern executive of the Church of England. I found, on application to competent persons, that it is not deemed expedient to be very diffuse upon the observance of the seventh commandment. I was referred, indeed, by one worthy divine to the head of "Fasts and Vigils" in our Offices; but, after careful perusal, I was unable to discover much that could be of assistance to the earnest layman desirous of arming himself against the promptings of nature and imagination.

The contrast, we may remark, between the common sense and wisdom of the more ancient writers and some modern ecclesiastical views on these subjects is rather painful. All the help that one excellent clergyman can give to tempted brethren is this: "Another man is tormented by evil thoughts at night. Let him be directed to cross his arms upon his breast, and extend himself as if he were lying in his coffin. Let him endeavour to think of himself as he will be one day stretched in death. If such solemn thoughts do not drive away evil imaginings, let him rise from his bed and lie on the floor."

As will be seen by reference to pp. 26 to 30, there is just so much truth in this advice as to cause a regret that the adviser had not the courage or the knowledge sufficient to go farther, and make it practical and useful.

I believe that in the writings of the more eminent divines among the various bodies of Dissenters in England, and the Protestant communities throughout Europe, there are to be found very few discussions of the subject of sexual temptations which can be appealed to as real aids to continence. Reference to the list of authorities I have consulted will show that some have, however, mentioned the subject.

The Church of Rome, with that practical wisdom which so often characterises her, and which no Protestant prejudices should lead us to deny, has, in many of her arrangements, and in much of her authorised teaching, fully and sympathisingly recognised the great

facts of the existence and intensity of sexual misery and temptation, and of the absolute necessity of perfect purity, for those who would reap the blessings of continence.¹

- 1"1. Of this commandment we can say but little. St Francis de Sales says that chastity is sullied by the bare mention of it. Hence let each person, in his doubts on this subject, take advice from his confessor, and regulate his conduct according to the direction which he receives. I will only observe here in general that it is necessary to confess, not only all acts, but also improper touches, all unchaste looks, all obscene words, and whether they are spoken with complacency and danger of scandal to others. It is, moreover, necessary to confess all immodest thoughts. Some uninstructed persons imagine that they are bound only to confess impure actions; they must also confess all the bad thoughts to which they have consented. Human laws forbid only external acts, because men see only what is manifested externally; but God, who sees the heart, condemns every evil thought. 'Man sees those things that appear; but the Lord beholdeth the heart.' (1 Kings xvi, 7.) This holds for every species of bad thoughts to which the will consents. In a word, before God it is a sin to desire whatever is criminal in act.
- "2. I have said thoughts to which the will consents. Hence, it is necessary to know how to determine when a bad thought is a mortal sin, when it is venial, and when it is not sinful at all. In every sin of thought there are there things; the suggestion, the delectation, and the consent. The suggestion is the first thought of doing an evil action which is presented to the mind. This is no sin; on the contrary, when the will rejects it, we merit a reward. 'As often,' says St Antoine, 'as you resist, so often are you crowned.' Even the saints have been tormented by bad thoughts. To conquer a temptation against chastity, St Benedict threw himself amongst thorns, St Peter of Alcantara cast himself into a frozen pool. Even St Paul writes that he was tempted against purity. 'There was given me a sting of my flesh, an angel of Satan to buffet me' (2 Cor. xii, 7.) He several times implored the Lord to deliver him from the temptation. 'For which thing thrice I besought the Lord that it might depart from me.' The Lord refused to free him from the temptation, but said to him: 'My grace is sufficient for thee.' And why did God refuse to remove the temptation? That, by resisting it, the saint might gain greater merit. 'For power is made perfect in infirmity.'
- "3. After the suggestion comes the delectation. When a person is not careful to banish the temptation immediately, but stops to reason with it, the thought instantly begins to delight, and thus continues to gain the consent of the will. As long as the will withholds the consent, the sin is only venial, and not mortal. But, if the soul does not turn to God, and make an effort to resist the delectation, the consent will be easily obtained. 'Unless,' says St Anselm, 'a person repel the delectation, it passes into consent, and kills the soul.'
- "4. The soul loses the grace of God, and is condemned to hell, the instant a person consents to the desire of committing sin, or delights in thinking of the immodest action, as if he were then committing it. This is called morose delectation, which is different from the sin of desire. He who contracts the habit of consenting to bad thoughts, exposes himself to great danger of dying in sin—first because it is very easy to commit sins of thought. In a quarter of an hour a person may entertain a thousand bad thoughts; and every thought to which he consents deserves a hell for itself.
- "5. My brother, do not say, as many do, that the sins against chastity are light sins, and that God has compassion on such sins. What! Do you say that it is a

Training of the will.—And now, leaving the religious aids to continence to those authorised to speak on the subject from that point of

light sin? But it is a mortal sin: even a sin of thought against chastity is a mortal sin, and is sufficient to send you to hell. 'No fornicator . . . hath inheritance in the kingdom of Jesus Christ and of God' (Eph. v, 5). Is it a light sin? Even the pagans held impurity to be the worst of vices, on account of the bad effects which it produces. Seneca says: 'Impurity is the foremost of the world's wickedness;' and Cicero writes: 'There is no more heinous pest than the indulgence of uncleanness.'—St Isidore has written: 'Whatsoever sin you name, you shall find nothing equal to this crime.'

"12. For those who are unable to abstain from impurity, or who are in great danger of falling into it, God has, as St Paul says, instituted matrimony as a remedy. 'But if they do not contain themselves, let them marry; for it is better to marry than to be burnt' (1 Cor. vii, 9). But, some may say, father, marriage is a great burden. Who denies it? But have you heard the words of the apostle? It is better to marry, and to bear this great burden, than to burn for ever in hell. But do not imagine that, for those who are unwilling or unable to marry, there is no other means but marriage by which they may preserve chastity. By the grace of God, and by recommending themselves to Him, they can conquer all the temptations of hell. What are the remedies? Behold them.

"13. The first remedy is to humble ourselves constantly before God. The Lord chastises the pride of some by permitting them to fall into a sin against chastity. It is necessary, then, to be humble, and to distrust altogether our own strength. David confessed that he had fallen into sin in consequence of not having been humble, and of having, perhaps, trusted too much in himself. 'Before I was humbled I offended' (Ps. cxviii, 67). We must, then, be always afraid of ourselves, and must trust in God that he will preserve us from sin.

"14. The second remedy is instantly to have recourse to God for help, without stopping to reason with the temptation. When an impure image is presented to the mind, we must immediately endeavour to turn our thoughts to God or to something which is indifferent.

"15. The third remedy is to frequent the sacraments of penance and eucharist. It is very useful to disclose unchaste temptations to your confessor. St Philip Neri says that a temptation disclosed is half conquered. And should a person have the misfortune to fall into a sin against purity, let him go to confession immediately. By ordering him, whenever he fell into sin, to confess it immediately, St Philip Neri freed a young man from this sin. The holy communion has great efficacy in giving strength to conquer temptations against chastity. The Most Holy Sacrament is called 'wine springing forth virgins' (Zach. ix, 17). The wine is converted into the blood of Jesus Christ by the words of consecration. Earthly wine is injurious to chastity; but the celestial wine preserves it. . . .

"17. The fifth remedy, which is the most necessary for avoiding sins against chastity, is to fly from dangerous occasions. Generally speaking, the first of all the means of preserving yourself always chaste, is to avoid the occasions of sin. The means are, to frequent the sacraments, to have recourse to God in temptation, to be devoted to the Blessed Virgin; but the first of all is to avoid the occasion of sin. 'And your strength,' says Isaias, 'shall be as the ashes of tow . . . and there shall be none to quench it' (Isa. i, 31). Our strength is like the strength of tow thrown into the fire—it is instantly burned and consumed. Would it not be a miracle if tow cast into the fire did not burn? It would also be a miracle if we

view, let us consider whether there is not much practical counsel to be given to the boy or youth who, having been made aware (as I suggest he should be), p. 44, of the ruinous effects of early impurity—is desirous of living a life of continence.

His object is—our object for him ought to be—to preserve a pure and healthy mind in a pure and healthy body. Judiciously directed training and exercise of both towards this definite object would, I am sure, in most cases reduce the difficulty of living a chaste life to the minimum, and, indeed, render the conflict rather a proud and thankful sense of self-command than an arduous struggle.

The first requisite is, that power of the mind over outer circumstances which we call "a strong will." Without this resolute grasp of the intellect and moral nature, to direct, control, and thoroughly master all the animal instincts, a man's life is but an aimless, rudderless drifting, at the mercy of every gust of passion or breeze of inclination towards tolerably certain shipwreck.

exposed ourselves to the occasion, and did not fall. According to St Bernardine, of Sienna, it is a greater miracle not to fall in the occasion of sin than to raise a dead man to life. 'It is a greater miracle not to fall when one is in the occasion of sin than to resuscitate the dead.' St Philip Neri used to say in the warfare of the flesh, cowards—that is, they who fly from occasions—are always victorious. You say, I hope that God will assist me. But God says: 'He that loveth danger shall perish in it' (Eccl. iii, 27). God does not assist those who, without necessity, expose themselves voluntarily to the occasion of sin. It is necessary to know that he who puts himself in the proximate occasion of sin is in the state of sin, though he should have no intention of committing the principal sin to which he exposes himself. . . .

"22. But let us return to the necessity of avoiding the occasions of sin. It is necessary also to abstain from looking at immodest pictures. St Charles Borromeo forbids all fathers of families to keep such pictures in their houses. It is necessary also to abstain from reading bad books, and not only from those that are positively obscene, but also from those that treat of profane love, such as certain poems, Ariosto, Pastor Fido, and all such works. O fathers! be careful not to allow your children to read romances. These sometimes do more harm than even obscene books: they infuse into young persons certain malignant affections, which destroy devotion, and afterwards impel them to give themselves up to sin. 'Vain reading,' says St Bonaventure, 'begets vain thoughts, and extinguishes devotion.' Make your children read spiritual books, ecclesiastical histories, and the lives of the saints. And here I repeat: do not allow your daughters to be taught letters by a man, though he be a St Paul, or a St Francis of Assisium. The saints are in heaven."—'Instructions on the Commandments and Sacraments,' translated from the Italian of Saint Alphonsus M. Liguori, Bishop of Agatha, by a Catholic Clergyman, pp. 154—173.

Divest this advice of the peculiar colouring derived from the Church of the writer, and, for the priestly confessor, substitute reverently the ear of our loving Father who is in heaven, and of Him who took our human nature upon Him in its completeness, that we might have no doubt as to His capability of sympathising with us in all our troubles and infirmities—Protestantize its phraseology in short—and it would be difficult to find any more worthy of adoption,—W. A,

It is a solemn truth that the sovereignty of the will, or, in other words, the command of the man over himself and his outward circumstances, is a matter of habit. Every victory strengthens the victor. With one, long years of courageous self-rule have made it apparently impossible for him ever to yield. The whole force of his character, braced and multiplied by the exercise of a lifetime, drives him with unwavering energy along his chosen course of purity. The very word we have used—continence—admirably expresses the firm and watchful hold with which his trained and disciplined will grasps and guides all the circumstances and influences of his life.

Contrast with this man the feeble-willed; for him the first little concession, the first lost battle between the will and a temptation, is but the commencement of a long series of failures. Every succeeding conflict is harder because the last has been lost. Every defeat lessens the last trembling remnants of self-reliance. And at last, with the bitterest pain of all—self-contempt—gnawing at his heart, with no strength to say, "I will not"—under the tyrannous dominion of foul passions, which all the good that is left in him abhors, the man slinks and stumbles towards his grave.

But, more than this, the steady discipline of the will has a direct physical effect on the body. The young man who can command even his thoughts, will have an easier task in keeping himself continent than he who cannot. He who, when physical temptations assail him, can determinately apply his mind to other subjects, and employ the whole force of his will in turning away, as it were, from the danger, has a power over the body itself which will make his victory tenfold easier than his who, unable to check bodily excitement, though determined not to yield, must endure in the conflict great sexual misery.

Dr Carter, in his 'Treatise on Hysteria,' makes some striking remarks on the effect of continual direction of the mind in producing emotional congestion of organs, which illustrate this view of the subject. He says (p. 13): "The glands liable to emotional congestion are those which, by forming their products in larger quantity, subserve to the gratification of the excited feeling. Thus, blood is directed to the mammæ by the maternal emotions, to the testes by the sexual, and to the salivary glands by the influence of appetizing odours; while in either case the sudden demand may produce an exsanguine condition of other organs, and may check some function which was being actively performed, as, for instance, the digestive."

In accordance with the same law, a steady avoidance of all impure thoughts—a turning away, so to speak, of the will from sexual subjects—will spare the young man much of the distress and temptation arising from the abnormal excitement of the reproductive system induced by the mind's dwelling much on such topics.

The essence of all this training of the will, however, lies in beginning early. If a boy is once fully impressed that all such indulgences are dirty and mean, and, with the whole force of his unimpaired energy, determines he will not disgrace himself by yielding, a very bright and happy future is before him.

A striking example of what resolution can do was related to me lately by a distinguished patient. "You may be somewhat surprised, Mr Acton," said he, "by the statement I am about to make to you, that before my marriage I lived a perfectly continent life. During my university career my passions were very strong, sometimes almost uncontrollable, but I have the satisfaction of thinking that I mastered them; it was, however, by great efforts. I obliged myself to take violent physical exertion; I was the best oar of my year, and when I felt particularly strong sexual desire, I sallied out to take more exercise. I was victorious always; and I never committed fornication; you see in what robust health I am, it was exercise that alone saved me." I may mention that this gentleman took a most excellent degree, and has reached the highest point of his profession. Here then is an instance of what energy of character, indomitable perseverance, and unimpaired health will effect.

The advice given by Carpenter in the fifth edition of his work, p. 779, is as follows:—"The author would say to those of his younger readers who urge the wants of nature as an excuse for the illicit gratification of the sexual passion, 'Try the effects of close mental application to some of those ennobling pursuits to which your profession introduces you, in combination with vigorous bodily exercise, before you assert that the appetite is unrestrainable, and act upon that assertion.' Nothing tends so much to increase the desire as the continual direction of the mind towards the objects of its gratification, especially under the favouring influence of sedentary habits; whilst nothing so effectually represses it as the determinate exercise of the mental faculties upon other objects and the expenditure of nervous energy in other channels."

With reference to the vital importance of a strong, well-trained will, we may also quote the valuable testimony of Dr Reid:—

"Let us, as psychological physicians, impress upon the minds of those predisposed to attacks of mental aberration, and other forms of nervous disease, the important truth that they have it in their power to crush, by determined, persevering, and continuous acts of volition, the floating atoms, the minute embryos, the early scintillations of insanity. Many of the diseases of the mind, in their premonitory stage, admit, under certain favorable conditions, of an easy cure, if the mind has in early life been accustomed to habits of self-control, and the patient is happily gifted with strong volitionary power, and brings

it to bear upon the scarcely formed filaments of mental disease. We should have fewer disorders of the mind if we could acquire more power of volition, and endeavour by our energy to disperse the clouds which occasionally arise within our own horizon—if we resolutely tore the first threads of the net which gloom and ill-humour may cast around us, and made an effort to drive away the melancholy images of the imagination by incessant occupation."

It should not be forgotten that this training of the will is not without its immediate and sensible rewards. Without it, or at least without some measure of it, those faculties of the mind on the regular exercise of which our success in any pursuit, and in fact our general intellectual advancement, depend, cannot be rightly cultivated. How absolutely essential it is for the attainment of real happiness, which depends so largely upon self-approbation, has been already noticed.

Exercise and Diet.—It is not, however, sufficient to train and strengthen the mind and will; the body must be subjected to a regular and determined discipline, before the proper command can be obtained over its rebellious instincts. And this discipline, when properly carried out, will not consist in any violation of the natural rules of health, but in a strict conformity to the hygienic regulations which science has proved must be obeyed before real health and vigour can be ensured.

For instance, religious and mental discipline may be vastly assisted by partial or total abstinence from fermented drinks and exciting animal food. Experience teaches us that by merely judiciously stinting the food of man in quantity and quality, while, at the same time, the brain is kept in exercise and the body fatigued, the animal instincts may be well-nigh subjugated. I cannot, therefore, but believe, that a well-directed combination of spiritual, mental, and physical training would secure, as nearly as man may hope for, a perfect result. I lay stress upon the words "judiciously" and "well-directed," because it is necessary I should guard myself against being supposed to counsel a rash or unscientific self-treatment. Much of the danger which has always attended attempts at ill-directed self-maceration, by fasting and purgatives, undertaken sometimes with a view of correcting corpulency and sometimes for mortification's sake, by religious enthusiasts, will as surely wait upon unscientific training to continence. During

'I am inclined to believe that many of the penances which ascetics in former times set themselves—such as starvation, scourging, and exposure—were the most potent means then known of restraining the animal passions, and teaching the sufferers from them to control their feelings; with the same object we may believe that many a hermit shut himself out of the world in order to escape the effect of female society. In the present day I am acquainted with individuals who in former times would have become some misdirected enthusiasts;—for human nature is little changed, although the fashion of self-chastisement has gone out. There are self-made martyrs in this pineteenth century, as there were in the sixteenth.

the initiatory period, at all events, some medical superintendence is desirable to decide when the process should be commenced and how it should be graduated, what amount of pressure may be put upon each constitution, when to increase and when to relax it, what should be the nature and extent of exercise, and the quantity and quality of nutriment required to keep the system in true form and balance.

I am convinced, all other considerations apart, that were there one or two days weekly set aside by all of us for extreme moderation in diet, public health and morals would be much benefited. The writer who would rationally consider and popularise such discipline, would be entitled to our thanks as a public benefactor. At present, all healthy persons in anything like easy circumstances eat and drink too much. Our over-eating is often attended visibly by the pendulous abdomen and lethargic frame, and less obviously by depreciated mental energy, and what I may term an artificial desire for and imaginary increase of sexual power. The dining, drinking, and sexual indulgence which are practised with unvarying regularity by too many of our young men among the middle classes who take little or no exercise, are acting as surely, though perhaps slowly, against the mens sana in corpore sano of the generation, as the opposite system I recommend of bodily labour and organised abstemiousness1 would tend to its maintenance. So we come after all to the good old adage on the way to live well—"On a shilling a day, and earn it."

Healthy and Intellectual Employment and Amusement.—The passive means, namely, abstinence from exciting causes, are not, however, the only ones that must be employed in order to maintain that condition of self-restraining health which we desire to see in young men;—active hygiene is most essential. Exercise, gymnastics, regular employment, and all agencies that direct the energies of the growing

¹ The influence of food in modifying the process of development is seen in a very marked form in the hive-bee. If we can put confidence in the observations of apiarians we must believe that the neuters which constitute the majority of every bee-community, are really females with the sexual organs undeveloped, the capacity for generation being restricted to the queen. If the queen should be destroyed, or removed, the bees choose two or three among the neuter eggs that have been deposited in their appropriate cells, and change those cells (by breaking down others around them) into royal cells, differing considerably from the rest in form, and of much larger dimensions; and the larvæ when they come forth are supplied with "royal jelly," a pungent, stimulating aliment of a very different nature from the "bee-bread" which is stored up for the nourishment of the neuters. After going through its transformation, the grub thus treated comes forth a perfect queen, differing from the "neuter" into which it would otherwise have changed, not only in the development of the generative apparatus, but also in the form of the body, in the proportionate length of the wings, in the shape of the tongue, jaws, and sting; in the absence of the hollow on the thighs, in which pollen is carried, and in the absence of the power of secreting wax.

frame to its increase and consolidation, and away from the indulgence of the reproductive organs, should be regularly used. I am convinced that much of the incontinence of the present day could be avoided by finding amusement, instruction, and recreation, for the young men of large towns. Every association or institution which encourages young men who desire to live virtuously to consort with one another on the principles of purity and self-denial seems to be worthy of all support and encouragement. Such bodies of young men are of the greatest use even to those who do not belong to them. They insensibly modify the tone of young men's society. They all help to render vice, at least open vice, unfashionable. This I believe has been one of the many good results arising from the praiseworthy efforts which have now for some years been made by the various Young Men's Christian Associations, to raise the tone of thought and feeling among the middle-class youth of England. Most perceptibly beneficial results, too, have been produced by the institution of reading-rooms, instruction classes, gymnasiums and places for healthy recreation, where young men may pass their leisure hours in a cheerful, agreeable way, and be not only to a great extent withdrawn from temptation, but directly brought under those influences which above all others lessen the force of that temptation. Every measure that provides healthy and rational occupation for young people—such, for instance, as the Government classes for improvement in art, and the throwing open the Kensington Museum for evening instruction—is a step in the right direction, and must tend to realise the one great object of improving the morals of the people.

Much has been written during the last few years on the national advantages of the Volunteer movement. Not the least, in my opinion, of these advantages is the direct influence it has had in promoting continence among our young men, not only by the excellent effect which drilling has had on their physique and health, but by the vigorous and interesting occupation it has afforded them for mind and body. It affords a notable instance of the effect which a well-directed movement, judiciously carried out, can have on the rising generation. Much of the dissipation and libertinage of our youth in past years has depended upon their having had literally nothing to do when their day's work was over. A pursuit which draws a man away from low society, and encourages him to spend his leisure in healthy and ennobling recreations among his equals, is most profitable to himself and his country. If the Volunteer movement had done nothing more than this, the parents of England would have had ample cause for supporting it.

¹ The physical advantages of the Volunteer movement have, of course, struck others besides myself. In a leading article in the 'Telegraph' for November, 1861, I read the following observations, which are evidently based on sound reason:—"The

Seeing as much as I do of the private life of young men in England, I can safely say that a healthier tone has sprung up among them of late, dependent, I believe, in great measure, on the love for athletic sports. In the course of years, I trust, it will be found to have exerted a most beneficial influence on the morals of the country.

I have now, I think, discussed the chief aids to continence. They will, I am firmly convinced, if honestly used, in most cases enable a young man to conquer in the noble endeavour to obtain and keep the mastery over his passions during the most trying periods of his life. Nevertheless, I should belie my experience as a medical man if I were to represent this struggle as an easy one. It needs the whole energy of any man to succeed completely. No legitimate inducement, therefore, to the effort should be withheld. The greatest of all such inducements undoubtedly is the prospect of early marriage; and this I would urgently press on the young, that the continent man is generally the energetic man, and that to the energetic man his trial is likely to be but temporary. He may fairly look forward to the time when he may think of marriage as the happy end to very much of the temptation which in early life requires so much anxious watchfulness, and even painful effort to subdue.

Surgical aids.—In the early editions of this book I treated only of the religious, educational, and hygienic plans for enabling a young man to continue or return to a continent mode of life which were most efficacious, leaving the medical treatment to a subsequent part of the book. Now, however, I propose before going further to show what surgical means there are of assisting the youth in his struggles against the temptations of the flesh.

Experience has taught me that the several remedies already considered, however beneficial in the slighter cases and in those instances where the sufferers have strong wills, are by themselves perfectly futile in a large proportion of the cases of young men who have little or no determination and perseverance. It is to this class of young men that the medical practitioner can render most important service, more especially when gymnastic remedies alone have been relied on and failed. The examination of a very large number of youths teaches me that sufferers through continence labour under a peculiar sensi-

physical advantages of the rifle-training are also great. A man of loose life or careless habits cannot become a good shot; dissipation over-night does not give either the cool brain or the steady hand absolutely required. In fact, the 'training' and 'keeping in good condition' required for success in our public matches are, though less harsh, as absolutely needful as those required from oarsmen in the Oxford or Cambridge crews. With such a new national game, loved by young Englishmen, we need not despair of keeping up fully to the old mark the physical and moral manliness of our race."

bility of the reproductive organs. No one who has not closely investigated this subject can have any idea of the morbid sensibility which we meet with, both externally and internally. If, therefore, we would assist the youth in maintaining continence, we must first of all palliate or remove this nervous hysterical-like sensibility which almost invariably attends such cases.

There are patients who can hardly allow the air to blow upon, or the clothes to touch their sexual organs. Such sensitive persons are afraid of using cold water, they dread the most cursory examination, and declare it would make them faint. The proposal to pass an instrument almost produces a state of catalepsy. In all these cases it is not pain, but the dread of being hurt, apparently, which produces the suffering. Once an examination is submitted to and the confidence of the patient gained, the cure progresses most rapidly. many instances this morbid irritability is confined to the skin, others only complain when the urethra is touched, or when an instrument passes over some particular portion of the canal, yet a second introduction of the instrument produces no inconvenience. When a surgeon has to treat such abnormally nervous patients as these, he will not be surprised that previous hygienic precautions or the inculcation of moral restraints have not succeeded in preventing emissions. As soon as local remedies have dulled the morbid sensibility of the sexual organs, the greatest advantage is at once derived from the moral and hygienic remedies.

In commencing the treatment of such cases the surgeon must evince some firmness of purpose, or the patient will not submit. The medical man in his first interview must be satisfied with moderate progress. In a day or two the patient will often ask him to proceed faster than he is disposed to do, so satisfied has the sufferer become of the benefit derived from the remedy. Simple local treatment will often suffice to cure the patient, but in more serious cases it may be necessary to employ instruments and use injections. These, however, will be more particularly alluded to in the chapter on Spermatorrhæa, to which I must refer my readers.

I shall have occasion to mention in the chapter on Marriage that its consideration as the legitimate hope of the young man who desires to remain continent suggests several questions, on each of which there is some difference of opinion, and neither of which should be omitted from consideration here. I refer to CELIBACY, EARLY MARRIAGES, and EARLY ENGAGEMENTS.

PART II

ABNORMAL CONDITION IN YOUTH

CHAP. I.—INCONTINENCE

In the previous chapter I spoke of the advantages of continence in youth. My remarks would not be complete were I to omit to say a few words on the evils of incontinence. I feel this to be all the more needful, as I am well aware that young men often wish to persuade themselves that incontinence is medically beneficial, or even necessary.

Notwithstanding the evils which, in the previous chapter, I acknowledge sometimes attend a state of continence (see p. 16), it is impossible for me to recommend illicit sexual intercourse. Setting aside moral considerations, I feel fully convinced that no physiological or other reasons can justify a medical man in suggesting or palliating any promiscuous or systematic commerce with women.

The occasional indulgence of the sexual feelings is not, in the first place, medically desirable, as it stimulates, without satisfying, the appetite, and each casual intercourse, again, is attended with this danger:—that it may but initiate a more permanent liaison, often fraught with painful consequences. If it once assume regularity, a man may form ties most difficult to break. The class of women who will accept a youth's attentions on these terms without marriage is beneath him in station and education. He finds himself presently in a false position. If the female is true to him alone, there is often great inducement to make her what in common parlance is called "an honest woman." Should a marriage ensue, the ill-fated youth—consigned to social ostracism—finds that he has learnt too late a bitter lesson for the rest of his life.

When, on the contrary, the sensual young man is fortunate or shrewd enough to avoid the "permanent liaison," and wise, no doubt, in his own conceit, indulges his passions by promiscuous illicit intercourse, the day is not far off when he will contract disease—particularly in England, where the complaints of prostitutes are too little cared for.¹

¹ Those who wish to pursue this subject further, should refer to the second edition of the author's work 'On Prostitution,' page 249, et seq., in which the dangers attending promiscuous intercourse are fully treated of.

The late Father Mathew knew human nature well when he enjoined, not moderate indulgence, but total abstinence from spirituous liquors. So it is with the sexual passion. It is easier to abstain altogether than to be occasionally incontinent and then continent for a period; and the youth is a dreamer, who will open the floodgates of an ocean, and then attempt to prescribe at will a limit to the inundation.

The medical, or so-called scientific adviser, who should recommend the commencement of a habit so dangerous, incurs the gravest responsibility. It should be rather the medical man's object to impress upon his patient's inexperienced mind the simple truth, that instead of being a mere sexual indulgence, the consorting with prostitutes is one of the very worst sins, both in nature and result, which man can commit. His tone should rather be that adopted in the following extract from a celebrated article in the 'Quarterly Review:'

"Our morality will be considered by the divines as strangely lax and inconsistent, and by the men of the world, the ordinary thinker, and the mass who follow current ideas without thinking at all, as savage and absurd; nevertheless we conceive it to harmonise with the ethics of nature and the dictates of unsophisticated sense. We look upon fornication, then (by which we always mean promiscuous intercourse with women who prostitute themselves for pay), as the worst and lowest form of sexual irregularity, the most revolting to the unpolluted feelings, the most indicative of a low nature, the most degrading and sapping to the loftier life,—

'The sin, of all, most sure to blight— The sin, of all, that the soul's light Is soonest lost, extinguish'd in.'

Sexual indulgence, however guilty in its circumstances, however tragic in its results, is, when accompanied by love, a sin according to nature; its peculiarity and heinousness consist in its divorcing from all feelings of love that which was meant by nature as the last and intensest expression of passionate love; in its putting asunder that which God has joined; in its reducing the deepest gratification of unreserved affection to a mere momentary and brutal indulgence; in its making that only one of our appetites which is redeemed from mere animality by the hallowing influence of the better and tenderer feelings with which nature has connected it, as animal as the rest. It is a voluntary exchange of the passionate love of a spiritual and intellectual being for the hunger and thirst of the beast. It is a profanation of that which the higher organisation of man enables him to elevate and refine. It is the introduction of filth into the pure sanctuary of the affections. We have said that fornication reduces the most fervent expression of deep and devoted human love to a mere animal gratification. But it does more than this; it not only brings man down to a level with the brutes, but it has one feature which places him far, far below them. Sexual indulgence with them is the simple indulgence of a natural desire mutually felt; in the case of human prostitution, it is in many, probably in most, instances a brutal desire on the one side only, and a reluctant and loathing submission, purchased by money, on the other. Among cattle the sexes meet by common instinct, and a common will; it is reserved for the human animal to treat the female as a mere victim to his lust."—'Quarterly Rev.,' July, 1850.

To this eloquent writer's indignant remonstrance may we not add a still more disinterested witness—even the old heathen Ovid.

"Sumite in exemplum pecudes ratione carentes
Turpe erit ingenium mitius esse feris.
Non equa munus equum, non taurum vacca poposcit
Non aries placitam munere captat ovem.
Sola viro mulier spoliis exultat ademptis
Sola locat noctes; sola locanda venit.
Et vendit, quod utrumque juvat, quod uterque petebat
Et pretium, quanto gaudeat ipsa, facit."

If, then, the benefits of continence be so great and the results of incontinence so deplorable, and if, as has been suggested, mere ignorance is so dangerously likely to lead youths astray, what reprobation can be too strong for those advisers, medical or not, who deliberately encourage the early indulgence of the passions, on the false and wicked ground that self-restraint is incompatible with health? What abhorrence can be too deep for a doctrine so destructive, or for the teachers who thus, before the eyes of those whose youthful ignorance, whose sore natural temptation, rather call for the wisest and tenderest guidance and encouragement, put light for darkness, evil for good, and bitter for sweet?

Unfortunately, it is not only among the dregs of either the medical or literary professions that these false teachers are to be found. The following opinions, enunciated by a writer of no mean standing or ability, may serve as an example of the kind of principles (if they can be so called) which I am deprecating.

"To have offspring is not to be regarded as a luxury, but as a great primary necessary of health and happiness, of which every man and woman should have a fair share.

"The ignorance of the necessity of sexual intercourse to the health and virtue of both man and woman, is the most fundamental error in medical and moral philosophy.

"The hopes of man lie in a nutshell; they are all comprehended in this question of questions—Is it possible to have both food and love? Is it possible that each individual among us can have a due share of food, love, and leisure?

"Rather than resign love, rather than practise increased sexual abstinence, and so check population, they (mankind) have been willing to submit to the smallest proportion of food and leisure which the human frame could for a season endure. The want of love is so miserable a state of constraint, and, moreover, so destructive to the health of body and mind, that people who have a choice in the matter will rather put up with any evils than endure it.

* * * * * *

"It may be mentioned as curious, that a young man entering on puberty is to indulge the exercise of all his organs, all his feelings, except that of the most violent—namely, love."

Few will be surprised, after reading the above, to find that this writer ¹ feels himself obliged, for consistency's sake, to admit, that what he calls unmarried intimacy should be sanctioned, precautions being taken to prevent the females having children; and to propose that the frail sisterhood should be received into society, because both they and their paramours but follow Nature's laws, and indulge sexual desires which Nature has given them for their own gratification.

I mention these opinions, not with the intention of wasting time in refuting them, but as showing the consequences such an argument must lead to, if carried out. I leave it to the reader's imagination to depict the state of society which would ensue.

Fortunately, such sophistry as that I have quoted is rare among English authors of reputation or ability. Similar sentiments, nevertheless, no doubt often float vaguely in the minds of many, especially in early life. The answer to them is very clear in the case we are now considering, viz. that of boys who have only just reached the age of puberty. For them it is sufficient to state the simple physiological fact, that, merely considering a boy of sixteen years old as an animal, any indulgence of his sexual passion is a direct and unmitigated mischief.

To himself, as we shall see further on, marriage would be attended with the worst possible consequences. And as regards any progeny he might beget, the results would be no less deplorable. His children would almost certainly be weak, sickly, difficult to rear, and wretched burdens to themselves and others if they were reared.

Even among the lower animals the provisions of nature and the experience of breeders indorse the rule which Tacitus tells us obtained among the ancient Germans—

"Sera juvenum Venus, ideo que inexhausta pubertas."

Nature does not permit animals to gratify their passions at the earliest moment that indulgence becomes possible. We find that the

¹ The anonymous author when he wrote this dangerous volume was, as he represents himself, but a medical student. Let us hope that ere this he has seen reason to alter his views, although, I regret to say, the latest edition of the work still contains these untrue and unphysiological statements.

I presume it is from such evidence as is gleaned from this writer that Professor Newman, an Emeritus Professor of University College, has in a recent pamphlet taken the medical profession to task for recommending fornication—a charge which I wish most energetically to repel.

young bucks are driven away from the hinds by the older and stronger ones. In a farm-yard the cock must show his provess, and win his spurs, before he is allowed by the more powerful birds to tread the hens. Breeders of cattle have long since ceased to raise their stock from either young males or females. The frame of the sire or dam must be perfected before their owners can call on them to discharge their procreative functions. I have been told that the demand for horses some years ago induced Yorkshire dealers to breed from mares at two years old. This injudicious practice was soon given up, as it was found that the system of the mother became impaired, and that the produce was good for nothing.

Parise has said, very truly, "to diffuse the species, the species ought to be perfect and in perfection." Puberty must not be just dawning; it must be in full vigour.

On this point, indeed, the testimony of all scientific and practical authorities is singularly unanimous. Carpenter says—

"This development of the generative organs at puberty is attended with manifestations of the sexual passion, but it can only be rightly regarded as preparatory to the exercise of these organs, and not as showing that the aptitude for their exercise has already been fully attained. It is only when the growth and development of the individual are completed that the procreative power can be properly exerted for the continuance of the race; and all experience shows that by prematurely and unrestrainedly yielding to the sexual instincts, not merely the generative power is early exhausted, but the vital powers of the organism generally are reduced and permanently enfeebled, so that any latent predisposition to disease is extremely liable to manifest itself, or the bodily vigour, if for a time retained with little deterioration, early undergoes a marked diminution."

One argument in favour of incontinence deserves special notice, as it purports to be founded on physiology. I have been consulted by persons who feared, or professed to fear, that if the organs were not regularly exercised, they would become atrophied, or that in some way impotence might be the result of chastity. This is the assigned reason for committing fornication. There exists no greater error than this, or one more opposed to physiological truth. In the first place, I may state that I have, after many years' experience, never seen a single instance of atrophy of the generative organs from this cause. I have, it is true, met with the complaint—but in what class of cases does it occur? It arises in all instances from the exactly opposite cause—early abuse: the organs become worn out, and hence arises atrophy. Physiologically considered, it is not a fact that the power of secreting semen is annihilated in well-formed adults leading a healthy life and yet remaining continent. I have daily evidence that the function goes

on in the organ always, from puberty to old age. Semen is secreted sometimes slowly, sometimes quickly, but very frequently only under the influence of the will. I have already referred to the fact—which I shall hereafter treat of in more detail—that when the seminal vessels are full, emission at night is not unfrequent. This natural relief will suffice to show that the testes are fully equal to their work when called upon. No continent man need be deterred by this apocryphal fear of atrophy of the testes from living a chaste life. It is a device of the unchaste—a lame excuse for their own incontinence, not founded on any physiological law. The testes will take care that their action is not interfered with.

That continence is not followed by impotence is shown most forcibly in animals. Mr Varnell, late a professor at the Veterinary College, told me of an entire horse, kept by a friend of his for hunting. This animal early in life was not allowed to mount mares, yet was quiet in their presence and hunted regularly. When twenty years old he was put to the stud and became a sure foal-getter.

It is, I repeat, my deliberate and earnest advice to all boys as well as young men to live a perfectly continent life, in thought, word, and deed. It is quite possible; and the means I have pointed out in the foregoing part of this work, pages 21 to 32, viz. regular training of the will—and careful attention to exercise and general hygienic treatment of the body—are, even apart from the greatest preservative of all—true religious feeling—amply sufficient to attain this end, unless in a few exceptional cases.

CHAP. II.—MASTURBATION

From the general view of continence and incontinence presented in the previous chapter, I pass on to the consideration of that particular form of incontinence to which children and youths are more especially liable.

SECT. I.—MASTURBATION IN EARLY CHILDHOOD

Masturbation may be best described as an habitual incontinence eminently productive of disease; its effects are worse than those of most diseases.

The term, like the word *Chiromania*, can properly be applied, in the case of males, only to emission or ejaculation induced by titillation and friction of the virile member with the hand; and in the course of the next few pages such will be the meaning of the term. Use has, however, given it a larger signification. It is now employed to express ejaculation or emission attained by almost any other means than that

of the natural excitement arising from sexual intercourse. In children too young to emit semen, friction of the organ is liable to produce that nervous spasm which is, in the adult, accompanied by ejaculation.

This degrading practice in a young child may arise in a variety of ways. The most common is of course the bad example of other children. In other cases, vicious or foolish female servants suggest the idea.¹ In such sexually disposed children as have been described above, the least hint is sufficient, or indeed they may, even without any suggestion from others, invent the habit for themselves. This latter origin, however, is rare in very early life.

THE SYMPTOMS which mark the commencement of the practice are too clear for an experienced eye to be deceived. As Lallemand remarks: "However young the children may be, they become thin, pale, and irritable, and their features assume a haggard appearance. We notice the sunken eye, the long, cadaverous-looking countenance, the downcast look which seems to arise from a consciousness in the boy that his habits are suspected, and, at a later period, from the ascertained fact that his virility is lost. I wish by no means to assert that every boy unable to look another in the face, is or has been a masturbator, but I believe this vice is a very frequent cause of timidity. Habitual masturbators have a dank, moist, cold hand, very characteristic of great vital exhaustion; their sleep is short, and most complete marasmus comes on; they may gradually waste away if the evil passion is not got the better of; nervous symptoms set in, such as spasmodic contraction, or partial or entire convulsive movements, together with epilepsy, eclampsy, and a species of paralysis accompanied with contractions of the limbs." (Vol. i, p. 462.)

Besides the physical symptoms, there are many signs which should warn a parent at once to use all possible precautionary measures. Lallemand truly remarks—" When a child, who has once shown signs of a good memory and of considerable intelligence, is found to evince a greater difficulty in retaining or comprehending what he is taught, we may be sure that it does not depend upon indisposition, as he states, or idleness, as is generally supposed. Morever, the progressive derangement in his health, and falling off in his activity, and in his

¹ I have heard of a vile habit which some foreign nurses have (I hope it is confined to the Continent) of quieting children when they cry by tickling the sexual organs. I need hardly point out how very dangerous this is. There seems hardly any limit to the age at which a young child can be initiated into these abominations, or to the depth of degradation to which it may fall under such hideous teaching. Books treating of this subject are unfortunately too full of accounts of the habits of such children. Parent Duchâtelet mentions a child which, from the age of four years, had been in the habit of abusing its powers with boys of ten or twelve, though it had been brought up by a respectable and religious woman. ('Annales d'Hygiène Publique,' tome vii, 1832, p. 173.)

application, depend upon the same cause, only the intellectual functions become enfeebled in the most marked manner." (Vol. iii, p. 165.)

Provided the vicious habit is left off, or has not been long practised, the recuperative power of Nature in the boy soon repairs the mischief, which appears to act principally on the nervous system,1 for in very. young boys no semen is lost. If, however, masturbation is continued for any length of time Nature replies to the call of the excitement, and semen, or something analogous is secreted. Occasionally, the ejaculation gives pleasure, and there is then great danger of the habit becoming confirmed. In proportion as the habit is indulged in, the boy's health fails, he is troubled with indigestion, his intellectual powers are dimmed, he becomes pale, emaciated, and depressed in spirits; exercise he has no longer any taste for, and he seeks solitude. At a later period the youth cannot so easily minister to his solitary pleasures, and he excites his organs the more as they flag under the accustomed stimulus. There is a case, related by Chopart, of a shepherd boy who was in the habit of passing a piece of twig down the urethra, in order to produce ejaculation, when all other means had failed.

Prognosis in Early Childhood.—Evil as the effects are, even in early childhood, the *prognosis* of the ailment, looking on it as an ailment, is not, in children, unfavorable. Lallemand observes:—"In respect to the evil habit in children, it is easy to re-establish the health, if we can prevent the little patient masturbating himself, for at this period the resources of nature are great;" the French professor does not, however, think that "it is so easy to repair the injury inflicted on nutrition during the development of the body; nevertheless he has seen the consequences disappear readily, and all the functions become re-established. (Vol. i, p. 468.)

PREVENTIVE TREATMENT.—I cannot but think that many of the evil consequences following this practice could be prevented, by wisely watching children in early life; and, where a sexual temperament, a suspicion of the practice having been only recently indulged in, or other circumstances, render it desirable, by pointing out the dreadful evils that result from the practice, and kindly but solemnly warning

1 Lallemand admits that in children it is not the loss of the semen that can produce the usual effects of spermatorrhea, but that the symptoms must depend upon the influence exercised on the nervous system, or what he terms the *ébranlement nerveux épileptiforme*, the impairment or exhaustion of nervous power which follows over-excitement, tickling, or spasmodic affections in young and susceptible children, and which may produce such a perturbation of the nervous system as to occasion even death. He gives an instance of this, which he attributed to the effect produced on the brain by repeated convulsive shocks similar to those which susceptible subjects receive when the soles of the feet are tickled. (See Lallemand, pp. 467-8.)

them against it. I have noticed that all patients who have confessed to me that they have practised this vice, have lamented that they were not, when children, made aware of its consequences, and I have been entreated over and over again to urge on parents, guardians, schoolmasters, and others interested in the education of youth, the necessity of giving their charges some warning, or some intimation of their danger. Almost all sufferers coincide in the opinion that at the early age at which these practices are learnt, it is generally mere curiosity which prompts to them. And it is often only when too late, that the adult finds out that the idle trick of the child, practised in ignorance of consequences, has resulted in seriously impaired health, if not in calamities that embitter his whole after life. It is not to be denied, however, that there are great difficulties in the way of carrying out these preventive measures. I find, for instance, that the parents of boys about to be sent to school are—not unnaturally—most unwilling to speak of these matters to their sons. In addition to the instinctive shrinking which every right-minded person must feel from the risk of putting ideas of impurity into a child's innocent mind, a parent's pride leads him to hope that his boy would not indulge in any such mean and disgusting practices, while he trusts that he may safely leave these matters to the master whose interest, as well as duty it is to check such evils.

The schoolmaster, on the other hand, is just as disinclined to interfere. Till it is positively forced upon his notice, he will, most naturally, affirm that the practice never has existed, and never could be countenanced in his school. Many masters feel, and say, that such precautions are no business of theirs. They hint at the delicacy of the subject and ask how they can even allude to matters of this kind, which do not properly come under their supervision. They assert that it is the parent's duty, and that if proper care be taken to see that boys are well brought up, they will not fall into dirty habits of any kind, much less into so filthy a one as masturbation. And, indeed, it is a good deal to ask of a schoolmaster. He naturally feels that, when he has done all he can in the way of supervision and management to prevent his boys from indulging in evil propensities, the responsibility of warning them against habits which he hopes they have never heard of, and which might be put into their heads if he were to broach the subject at all, is greater than he ought to be called upon to bear. If he were, he says, to discover any boys practising or inciting others to practise the evil habit, they would of course be severely punished or even expelled; but never having discovered such offenders, he does not believe the habit is indulged in at all, and declines to interfere. At schools I fear it is impossible to doubt that these practices are (though perhaps less frequently than formerly) indulged in, and as

I have said, it is my deliberate opinion that in many cases it would be true wisdom and true kindness for a parent openly and in plain language to lay before a boy the full extent of his danger, and impress upon him as urgently as possible, the fact that it is a danger, and that the consequences of yielding on his part will be most lamentable. In many cases an elder brother may be asked to speak to a youth, and warn him of the ill results which playing with the organ will induce. I have myself no hesitation as to the advice I should give to parents in such matters. In all cases, I would tell them, the best preventive step to be taken is to watch their children, if not actually to warn them against what it is to be hoped they are ignorant of, and to develop all their muscular powers by strong gymnastic exercises.

A vigorous healthy boy is not likely to have any tendency to debase himself, and it is a question with many parents if it is wise (on his going to school) to caution him against the vile habit of masturbation and its consequences. My own impression once was, that it would be a pity to poison the mind of a high-spirited lad with any cautions about such debasing practices; but that opinion has been altered by the confessions of many who, in ignorance of the results, have, by the example of others, been led to practise masturbation. I believe that in many cases a parent should at least hint to his son that he may very possibly have to witness unclean practices, and warn him at once manfully to resist and oppose them, pointing out at the same time the consequences to which they tend. There may be the risk of tainting an ingenuous mind by broaching such a subject, and unfolding before it this distressing page in the book of knowledge of good and evil; but, when it is needful, a father should in my opinion accept the grave responsibility and ought not to fall into the greater unknown ill of dismissing his child to the probability of contamination, without an attempt to save him. I esteem it false delicacy and a wrong, that a parent should hesitate to warn his boy, when, at the most, he can only anticipate by a few days or weeks the offices of a youthful schoolmaster in vice, as ignorant of consequences as the pupil, and unable to administer the antidote with the poison.

Whatever may be considered the best course for ordinary children, on one point my mind is fully made up. If I saw a young boy paying attention to female children only, and toying with them I should watch over his career most anxiously. On the occurrence of any symptoms of debility, paleness, or ill-health, my vigilance would be still greater, particularly if I observed any development of the idées génésiques, as Lallemand calls them. In such a case I should have no hesitation in directing the precocious child's attention to the pitfall yawning before him, fully convinced that not only could advice do no harm, but that I should merely be teaching such a boy what he ought

to know by calling his attention to sexual subjects. I am of opinion that I should but anticipate the natural curiosity of such peculiarly organised children, who early acquire, from the habit of watching animals, and reading novels left about by their seniors, a smattering knowledge which excites their feelings, but which teaches them nothing of the ill consequences of the only sexual indulgence they can practise at this early age. To suppose that a parent can keep such a sexually disposed child from knowing much that he had better not be acquainted with, shows a grievous ignorance of the infantile mind. But this mind may be regulated, and the dangerous consequences of the practices may be pointed out.¹

Although I would not give too much weight to the opinions of sufferers, yet I cannot refrain from introducing the following unsolicited letter from a patient on this duty of parents to their children.

"I fear you may think me somewhat presuming if I say how enitrely I agree with you as to the desirableness, not to say absolute duty, of parents and others duly to caution youths as to their conduct in early life relating to sexual matters. Had my father taken such a course with me, I am fully justified in saying I should not have fallen into an error which I now most deeply deplore. This was all that was wanted, for the strictly moral way in which I have been brought up has prevented me running into any of the excesses of the day. But, of course, I went to a large public school, and there, of course, became acquainted with the practice of masturbation, and, almost equally as a matter of course, indulged in the habit, and, without a thought of its baneful consequences, have practised it for years. In fact, I fear you must somewhat doubt this statement, but I assure you it is the literal fact, I pursued the practice from an idea of its necessity, and was fortified in my supposition (so ignorant was I) by the idea that, if omitted, nocturnal emissions supplied the omission of the practice. Besides, I considered it a natural means for allaying the sexual desire, the act relieving me from such desire for some time.

"I see now and regret deeply the great folly of which I have been guilty, but am I wrong in feeling some indignation at not having been put better on my guard by those I considered my instructors? Recently, however (I am now near twenty-two), I happened to discover the disastrous results likely to ensue, and also that nocturnal emissions are symptoms of disease. I, of course, immediately relinquished the habit, never to resume it. I must say, however, that it never had the effect upon me I should have expected from reading your book, inasmuch as I have always appeared and felt strong, healthy, vigorous at school, very fond of play, subsequently well able to perform my daily duties either as regards business or intellectual engagements, and have never been averse to society."

As I was preparing a former edition for the press, a stranger called on me to ask my opinion as to what he should do in the case of a boy of twelve years whom he suspected of evil practices. The boy had fallen away in his studies, had dark patches under his eyes, and was depressed in spirits. In such a case I told him I should have no hesitation in quietly talking to the boy, without taxing him with any evil practices (which the lad would probably deny). I should tell him that it was well recognised that secret vices are sometimes carried on at schools. I should tell him that such practices cannot be continued with impunity, and warn him against them. Steps must, of course, be taken at the same time to improve his general health.

We have already seen that as a rule in the case of young children the practice has only to be left off, and the system will speedily rally. One great advantage in early warning a boy, therefore, is that, as he probably derives little or no pleasure from the act, if he is once put in possession of the probable consequences, he will very likely abandon the practice. His example and advice may, moreover, deter others, who are not so well informed. So strongly do I fell the propriety of such a course of proceeding in the case of sexually disposed children, that I would urge parents, if they feel themselves unequal to the responsibility, to transfer the duty to their medical adviser.

I have been so often urged by parents and schoolmasters to draw up a plan which might be of service in teaching them how properly to address children, as well as boys arriving at the age of puberty, that I had determined, to trace out a few notes which might aid parents desirous of following my advice. In place of any words of my own, however, I will here give, by the kind permission of the author, the following advice taken from a pamphlet printed by a clergyman, but never published:-"Advantage could, and ought to be taken of the opportunity when a boy says his catechism to explain to him the meaning of some of the terms therein mentioned. When a child is taught 'to keep his body in temperance, soberness, and chastity,' it would not be difficult to explain to him what chastity is, instead of leaving him to find it out, as best he may. He might be given to understand that it does not merely mean that all indecency and foul language must be shunned. The child might be told that he must keep his hands from meddling with his secret parts, except when the necessities of nature require it; and that any emotions he may experience in those members must not be encouraged, and all thoughts which originate them must be avoided. And when he grows older every boy should be taught that chastity means continence; that if he would be chaste he must not by any act of his own, or by the indulgence of lascivious imaginations, cause the fruit of his body to be expended. He should be taught that all such expenditure is a drain upon his whole system, and weakens the powers which God has given him to be employed only in the married state. He may be sure that 'his sin will find him out,' and if he marries with his powers underminded by unlawful gratification, it will be visited upon his children also.

"If he is old enough to understand the subject, the youth entering upon puberty might have explained to him some of the mysteries of life, probably it would not be incompatible with his age to explain to him that the life of the animal and vegetable kingdoms is continued and increased through the power of reproduction, with which the Creator endowed the whole produce of the earth. It is the nature

of every herb, that it 'yieldeth seed,' and of the fruit tree yielding fruit, that its 'seed is in itself' (Gen. i, 12). It is the nature of every living creature 'to be fruitful and multiply' (Gen. i, 28). This power of reproduction or of generation constitutes the very essence of life. To enable this vital function to be fulfilled, every plant, and every animal is furnished with organs of reproduction. As it has organs of respiration for breathing the air, organs of motion, organs of digestion for assimilating its food, so it has organs of reproduction, for handing on the life it has received, and reproducing itself in its offspring. This is the most important function of the whole vital economy of every living form.

"We might further explain to him that our life is bound up with the reproductive organs of the body. Now what every young man, and boy also, ought to know about himself is this. The two appendages of the body, of which we are too modest to speak, but which Holy Scripture calls 'the stones,' and medical men the 'testes' or 'testicles,' form the laboratory of the human body, where by a process of which we are quite unconscious, the blessing given to man at the Creation is being fulfilled, and out of the system a vital fluid, which is the very 'Essence of Life,' the source of Being (a life and being, remember, derived from God) is being constantly produced from the time of puberty, to be employed, when he reaches maturity, not in the gratification of the lusts of the flesh, but in the procreation of children.

"The boy might be taught the immense importance to the human constitution of this vital substance, the seed of man which is elaborated by the organ of reproduction, and it should be made clear to him how terrible the consequences must be if the life be continually flowing away from his body.¹

"The opportunity might be taken of informing the youth that many whose lives are outwardly pure have fallen into 'secret sins' (Ps. xix,

Parise, on speaking on this subject, very eloquently observes, "One grand purpose pervades the creation—to live and to impart life. This last function ought to be considered the most important. If men will conform to the laws of naturelaws which, moreover, are immutable and eternal—they must submit themselves to conditions of existence and of organization, and learn how to limit their desires within the spheres of their real wants. If they will do so, wisdom and health will bloom of themselves and abide without effort; but all this is too often forgotten when the functions of generation are in question. This sublime gift of transmitting life—fatal prerogative, which man continually forfeits-at once the mainstay of morality, by means of family ties, and the powerful cause of depravity—the energetic spring of life and health—the ceaseless source of disease and infirmity—this faculty involves almost all that man can attain of earthly happiness or misfortune, of earthly pleasure or of pain; and the tree of knowledge of good and evil is the symbol of it, as true as it is expressive. Thus even love by its excesses hastens and abets the inevitable doom for which, in the first instance, by the aid of passion, it had provided the victims."

12), and wasted their substance in solitary indulgence. And the consequence of such indulgence is not confined to the act itself; but the violated body becomes unable to contain its treasure, and as fast as it is elaborated the seed is poured away on the slightest provocation in sleep, and in the performance of the acts of nature.

"He might be further informed that many of the sicknesses to which we are subject may be traced to this cause, and that many of those complaints set down as nervous debility, much languor and loss of spirit, much feebleness of mind, much dimness of sight, much loss of manly bearing, to which we must add many cases of the loss of reason and an imbecile and drivelling old age, are the inevitable result of the expenditure of the vital forces in sinful gratification.

"I would further instruct a youth that this degrading practice obtains such a hold upon any one indulging in it, that he seems unable to free himself from its grasp. Again and again he yields to its importunity, and life ebbs away from him, mind and body becoming undermined.

"It is a sad and melancholy truth, that many whose childhood has been most pure and spotless, have fallen most deeply, when their passions have been awakened, through absence of all warning on the subject, and in ignorance of the self-destruction they were committing." ¹

I maintain that a conscientious schoolmaster's task does not end with providing for cleanliness, decency, and exercise among his boys. In spite of his assumed ignorance of the existence of the practice, masturbation and other vices may spread widely through the school unless careful supervision be employed. Against these secret evils there is no better safeguard within his reach than a steady endeavour to raise the moral tone of the whole school by means of the upper forms, so that the elder boys may of their own accord join in discountenancing any ungentlemanly or disgraceful conduct. Without some such auxiliary, the efforts of the best-intentioned master to prevent the practices with their demoralising accompaniments and consequences will be almost powerless.

How diffused secret wickedness may become in schools appears every now and then in scandals so dreadful, that the natural tendency of all concerned is to hush them up and forget them as speedily as may be. Indeed it is impossible not to sympathise with the feeling, that to be obliged seriously to doubt as to the manliness, and, in a

¹ Some such advice as this will, I am sure be gratefully acknowledged by many parents, and I have introduced it here in the language of the author; at the same time I have taken the liberty of altering its phraseology a little, to adapt it to my book; but in the views which it inculcates I quite coincide, and am pleased to acknowledge in the author one of my most able coadjutors.

rough way, of the purity of our large schools, would be a great calamity. And in the main this confidence has been no doubt hitherto justified. Still, there are points on which I think all concerned may be a little too confident, not to say remiss. One in particular I wish to mention (I can hardly do more). It seems to be included clearly within the scope of these remarks.

I think a schoolmaster should be alive to the excessive danger of the platonic attachments that sometimes become fashionable in a school especially between boys of very different ages. I am not speaking of ordinary boyish friendship, than which there can hardly be a greater blessing, either during boyhood or in after life. I would encourage such friendship in every way I could. Growing as it does with the growth of the boys, strengthening with their strength, and cemented by scrapes, fights, sports, sorrows, all increasing their mutual respect and interest, such a manly happy connection strikes its roots so deep as generally to survive most other ties. I am speaking of what schoolmasters cannot be ignorant of—the sentimental fancy taken by an elder boy to a younger, between whom there can be, in the regular course of the school, little natural companionship, and having about it a most unpleasant and dangerous resemblance to abnormal passion. I know that such attachments have led to most melancholy results. I have been made aware that some public-school men have declined masterships in their own school because they knew the custom prevailed-which they were alike unable to sanction, and afraid to attack. I have been informed that it has been preached at, not obscurely, from school pulpits. And I could point to living men, with a wretched burden of recollection from it on their consciences which they would give the world to erase.

I am not suggesting that such modern imitations of ancient platonic attachments are universal, general, or even common in English schools. I only say that they do sometimes exist, and that to the remotest approach to the manners or the morals of the Phædrus the schoolmaster should be sensitively alive.

No doubt it has often struck others as it has myself, how advisable it would be in schools, and, indeed, in all institutions where bodies of boys or young men are collected, to establish, if possible, a kind of public opinion as a rallying point for virtue. There is never any lack of fellowship and countenance for vice; the majority too often favour or support it more or less openly. To make virtue, propriety, self-restraint, fashionable (so to speak) should be, it appears to me, one of the chief objects at which masters and tutors should aim. With admirable common sense and shrewdness the Rev. Sydney Smith recommends the enlistment of the dread of ridicule, even, on the same side:

—"Put a hundred boys," he says, "together, and the fear of being

laughed at will always be a strong influencing motive with every individual among them. If a master can turn this principle to his own use, and get boys to laugh at vice, instead of the old plan of laughing at virtue, is he not doing a very new, a very difficult, and a very laudable thing?" Surely by means of frank sympathy, thorough earnestness, and spotless rectitude in the instructor, it can be The help which such a tone of feeling would be to a wavering boy is incalcuable. Supported by such a "public opinion," a well-disposed boy would have no need to blush when tempted or jeered at by the licentious. Innocence, or even ignorance of vice will no longer be a dishonour or a jest. The better disposed will reprove any immorality, and utterly discountenance all conduct inconsistent with the character of a Christian and a gentleman. No one can have read the life of the late Dr Arnold without seeing that it was one of the chief objects of his life to establish some such feeling as this among his boys. That he was to a great extent successful those who have had the good fortune to become acquainted with any number of his pupils will be the first to acknow-

This manful meeting of temptation is not only, in my opinion, a far more courageous, but a far more successful way of disciplining the young to virtue than that sickly, hotbed training, that keeps them more often ignorant than innocent. Herbert Spencer, in speaking of moral education, has well remarked:—" Remember that the aim of your discipline should be to produce a self-governing being, not to produce a being to be governed by others. As your children are by and by to be free men, with no one to control their daily conduct, you cannot too much accustom them to self-control while they are still under your eye. Aim, therefore, to diminish the parental government as fast as you can substitute for it in your child's mind that self-government arising from a foresight of results. All transitions are dangerous, and the most dangerous is the transition from the restraint of the family circle to the non-restraint of the world. Hence the policy of cultivating a boy's faculty of self-restraint by continually increasing the degree in which he is left to his self-constraint, and by so bringing him step by step to a state of unaided self-restraint, obliterates the ordinary sudden and hazardous change from externally governed youth to internally governed maturity."—Moral Education (p. 140.)

In the same direction we find the weighty testimony of the Rev. Sydney Smith:—"Very few young men," he says, "have the power of negation in any great degree at first. Every young man must be exposed to temptation; he cannot learn the ways of men without being witness to their vices. If you attempt to preserve him from danger by keeping him out of the way of it, you render him quite unfit for

any style of life in which he may be placed. The great point is not to turn him out too soon, and to give him a pilot."

There are many parents who, when reports of police courts or divorce cases appear in the newspapers, at once burn the papers lest their sons should read the details. There are others who regret that the usual channels of public information should publish such cases; they dread (as they express it) that the morals of their sons should be corrupted.

My answer to these anxious parents is that in spite of all remonstrances these details will continue to be published; but I believe, as I stated July 16th, 1870, in a letter in the 'British Medical Journal,'—that "as a set-off to this publicity and inquiry which so many of my friends are now deploring, we have the compensation of noticing that, if the youth of the nineteenth century becomes now necessarily familiarised early with the details of vice, the knowledge is accompanied with the practical lesson that illicit pleasure is invariably attended with much physical pain. The veriest trifler who reads his penny paper cannot become acquainted with the offensive details there to be found, without listening to the attendant moral; and thus the antidote follows the poison. It is in this way that men of my mode of thinking view the distinction between the modern newspaper details and the prurient literature which has been generally known as Holywell Street. In this last-named literary garbage, illicit pleasure was depicted in all its most attractive and meretricious forms; but the anonymous author, like the translators of the Greek and Latin loves of the heathen gods and goddesses, omitted to allude to the frightful consequences that illicit love or bestial proclivities produce on all those who directly or indirectly indulge their animal instincts.

My ideas on the subject are strongly corroborated by some remarks published by the late Rev. Mr. Robertson, of Brighton, and as they have a practical bearing on the question, I reproduce them here:

—"I would far rather that there was much less of censorship of opinion. I know that millions of books, infidel and bad books, swarm out of the press, and yet I would not wish to see them stopped by force, except, of course, such as are shocking to public decency. Great as are the evils of unchecked license in publishing and reading, the evil of permitting any persons to restrict either authoritatively would be immeasurably greater. It is a part of our moral discipline. I would not have that exotic virtue which is kept from the chill blast, hidden from evil, without any permission to be exposed to temptation. That alone is virtue which has good placed before it and evil, and seeing the evil, chooses the good "(p. 73, 'Addresses').

The following letters with which I have been favoured on the subject strongly corroborate the views here expressed, and, giving as they

do the personal experience of the writers, are worthy of careful perusal.

---- Rectory, Feb., 18--.

Dear Mr. Acton,—It is indeed a difficult subject to treat wisely and usefully, but I fully believe you are right in saying that it ought to be faced; and though it is very questionable how far any publication should be placed in the hands of youth, yet good service is done if you supply parents and instructors with such information as shall enable them to speak to individual boys according to their discretion with a confident knowledge of those physical facts on which their admonitions are based.

You are not far wrong, I am afraid, in your facts, if I may judge from my experience of three great public schools and several private ones. And if I hesitate to adopt your opinion, it is on the à priori grounds that it is hardly conceivable that the wise and merciful Creator should annex so fearful a penalty to indulgences which the multitude are sure to fall into—indulgences which (unlike the luxuries introduced by art) are supplied—if that is not using too strong a word, for I will not believe they are suggested—by nature itself. A priori grounds, however, in such a question, are very uncertain ones. I do not know whether the case is the same with the labouring population or with savage nations. If not, we may believe that artificial stimulus brings the upper classes, and civilised societies, under a probation which sifts them justly, and provides for the deterioration and downfall of those who do not stand the test.

I think those judge erroneously who select the public schools as the chief seat of this evil. My own experience is the other way. I used to see it practised shamelessly at a large private school I was at; and, alas! it was known and taught even at a little one, of boys all below ten years old, where I was before that. At ----, on the other hand-which I consider far the purest of the three public schools I have been connected with an open or avowed practice of the vice was sternly repressed by the force of public opinion; and this is more or less the case, I believe, at all of them. The superiority of — I attribute principally to the influence of the monitorial system, which modern sentimentalism is trying to undermine, and which was far more firmly and effectively at work there than at another school which has been more especially selected by the assailants as their point of attack. No system, however, can prevent the secret indulgence of the vice, nor the communication of this habit from one boy to another. Parents and tutors may well be assured that, wherever a few boys are gathered together, the evil will become known, however it be regarded by individuals or by the majority; and it follows that such advice as you recommend ought not to be withheld from those who are in danger. Still I dare not urge that the instinctive feeling of the heart should be outraged, or in any way overborne. A hint, a word, addressed to a young boy may often suffice to strengthen the resolutions of purity—a fervent exhortation to chastity and modesty, with a warning that he will be tempted by his fellows to evils which perhaps he is ignorant of; and an affectionate invitation on the parents' part to confidence and confessions, which may in many cases make it necessary, or very advisable, to go much more deeply into the matter.

At any rate, it is very important, as I said at first, that parents and tutors should be fortified with a knowledge far greater than they generally possess on these subjects. I should have found it myself far easier to deal with cases of this sort among my pupils had I felt more secure of my point on physiological as well as religious grounds. And in each individual case, I believe, in that desperate struggle which every one has

to maintain in early life who tries to rule his passions by the law of God—every one, that is, who has once let go the reins, and has to gather them up again—in would be the greatest encouragement to know that physical science confirms the dictates of revelation, and to know why and how to look for the aid of nature in resisting an almost resistless propensity.

Believe me, yours very truly,

The second is from a member of one of the universities, who had been previously at a large public school:

_____, ____, 18__.

Dear Sir,—In these few lines I will endeavour to state, as clearly as possible, my opinions on the suppressal of the vice which formed the subject of our conversation yesterday evening.

The suppressal of this vice at a school cannot, I think, be effected by the authority of a master, nor can the efforts of the older boys, though they may forcibly put a stop to any open public practice of the same, compel the others to desist from it. Good, sound, scientific information is what, in my opinion, is required at schools, both public and private.

My first reason for saying this is, that by learning the consequences of this practice, I think a great many will be persuaded, through fear, to discontinue it.

It may be said, however, by some, that the ill effects of it are known at schools, but I can affirm that during the five years which I passed at school (both public and private), from the age of nine to fourteen, I never heard that any consequence followed this practice, except the vague one of "weakening."

My second reasoning is this. Curiosity, I am certain, from my own experience, and what I have seen at schools, is a great supporter of masturbation. Boys are naturally, from what they hear, curious to obtain some idea of sexual congress. With this intent they resort to the vice, and, with the hope of obtaining more information they search out all the amorous stories in the writings of classical authors, and in 'Lemprière's Dictionary.'

This curiosity, of course, causes the mind to dwell constantly on sexual subjects. I think, then, that good information will, by satisfying this curiosity, free the mind to a great extent from sexual thoughts. I will now venture to suggest in what way the necessary information may be communicated to the boys.

It is obvious that if some of the older boys were made acquainted with the subject, and not the masters, when the former left the school there would be no one remaining to impart the information to others.

I should suggest, then, that all the masters be provided with such information as is necessary. They might, I think, very well speak to some of the senior boys on the subject, and request them to warn the others of the practice, and exhort them to discontinue it.

The doctor of the place might be considered, perhaps, a fit person to speak to the boys. I think, however, that if he alone were to give his advice, the boys would not perceive that a general interest was taken in the matter, but that it was a subject in which he, as a medical man, was alone concerned; and so probably even his advice would not have the influence which it otherwise might. He, of course, by acting in concert with the masters, might do a great deal.

It might, perhaps, be advisable for the masters to lend a medical work such as your own to the senior boys, in order that they might see that the ill effects of the practice were not fancies of the masters, but that they were well known by surgeons and other medical men.

Hoping that these suggestions may prove useful both to yourself and the public,

I remain, yours truly,

PREVENTIVE TTEATMENT.—If the practice of masturbation be ascertained to exist, steps must be taken to check it. In young infants the habit may be corrected by the ordinary mode of muffling the hands, or applying a sort of strait-waistcoat. But in attempting to prevent an older child polluting himself the most careful watching will often fail: especially is this so when emissions have produced those changes in the urethra and its appendages, which keep up the complaint and react on the brain, or which, having at first excited the boy's imagination, react again through the brain on the genito-urinary system.

In the growing boy it is of the most vital importance that the mind be directed into a different channel, and that every means be taken to check the secretion of semen. Experience has proved that to effect this, there is nothing so good as gymnastic exercises regularly employed and carried to an extent just short of fatigue. A taste should be encouraged for cricket, rowing, walking, swimming, and other athletic amusements. Under such training, if unfortunately self-abuse has been indulged in, the tendency to it will diminish even though involuntary nocturnal emissions may not cease at once. No doubt can exist that when the blood is diverted to the muscles as it is by taking violent exercise, semen is secreted slowly, if at all.¹

If irritation or inflammation of the vesiculæ seminales exist, the appropriate remedies, to be hereafter spoken of, must be combined with gymnastic exercises. If the surgeon has reason to suspect any of the other local causes of irritation, such as worms, stricture, hæmorrhoids, or fissure of the anus, these complaints must at once be attended to. An account of the proper treatment of these diseases, however, would be out of place here.

Where the fatal habit is discovered to be actually in existence, there can be no doubt that the consequences to which such indulgences lead

¹ Lallemand says—"The urgent necessity of recruiting each day the great waste occasioned by varied and progressive gymnastic exercise diminishes in an equal proportion the secretion of the semen; for the economy only occupies itself with the reproduction of the species when it has provided for the conservation of the individual, as I stated when speaking of the influence of nutrition on generation" (Vol. iii, p. 466).

should be plainly pointed out; and the youth should be taught to look upon masturbation as a cowardly, selfish, debasing habit, and one which makes those who practise it unfit to associate with boys of proper spirit. If this feeling can be so far established as to overcome the tendency, the surgeon can soon remedy the mischief that has been done by previous excesses. It is, I am convinced, from a want of attention—in parents, and those who direct the studies of youth—to the commencement of this evil habit, and of a little seasonable advice and judgment, that many a career begun under the most favorable auspices, has been thwarted, and many a boy's mental and bodily powers and growth checked.

Among what may be called the prophylactic remedies for self-abuse, the *sponge-bath* stands pre-eminent. Its constant use cannot be taught too early, for it not only conduces more than anything to the general health of children, but is within the reach of almost every one. In the nursery, indeed, and at home, it is now very generally employed. I see no sufficient reason why it should be left off when a boy goes to school. Its benefit is quite as great there as at college or during after life, when, with modern habits, it is pretty certain to be resumed. In all public schools, then, its use should, I submit, be enjoined, and I believe might be carried out with little trouble.

A few words on the method of taking a sponging-bath, so as to secure the greatest benefit, may be useful. The apparatus I recommend is a shallow painted zinc bath, such as can be purchased for about eleven shillings. A larger size would be proper for adults. It should be round, and not of the high-backed description termed the "hip-bath." With this, a water-can of a gallon and a half or two gallons capacity, and a honeycomb sponge (which holds water best) as large as the two fists, the outfit is complete.

Patients who have not been accustomed to sponge-bathing should use lukewarm water at first, and lower its temperature by degrees. The bather should sit down in the centre of the bath, with his feet on the floor, and then, having drawn back the foreskin, for one or two minutes briskly squeeze the water over his back, chest, abdomen, and thighs, taking care to lead as much as possible towards the genitals. He may then stand up in the bath, rapidly sponge the feet and legs, and on leaving the bath rub himself thoroughly dry, using roughish towels.

Cold shower-baths should never, I think, be used by an invalid or weakly person. They are a luxury for the strong only, and I am disposed to think the tepid sponge-bath, as a general rule, far preferable.

Sea or river bathing is a good thing, no doubt, but is never likely to be of the same value as the sponge-bath, as, from circumstances of

climate, weather, wind, rain, or trouble, danger of catching cold, &c., it is but few times comparatively that a boy bathes in a season. Still, as all influences of this kind are likely to be useful, every boy ought to learn to swim, though a dip in the sea or river should not be permitted to take the place of the sponge-bath. It must not, however, be forgotten that the habit of remaining too long in the water may be a source of evil. Boys should not be left to themselves in this indulgence. Indeed, their time for remaining in the water should be carefully regulated, as after the first shock and swim the system derives no benefit from being in the water, but, on the contrary, the exercise is succeeded by debility. In the public baths at Paris I have known boys from southern climates pass the whole of the morning in and out of the water, even taking their meals and smoking their cigars there, and looking as debilitated afterwards as possible, instead of presenting that ruddy glow of health which the rapid application of cold water to the surface ought to produce.

Among other preventive measures I should recommend the precaution which is, I believe, now almost universal in schools, that every boy should have a separate bed. This is, as regards the subject we are now treating of, most important, and should be made a sine quâ non in all schools. Evil practices are, I believe, most frequently commenced and practised in bed.

An additional advantage would perhaps be obtained if each boy in a school had not only a separate bed, but a separate compartment in which he might enjoy some sort of privacy.

SECT. II.—MASTURBATION IN THE YOUTH AND ADULT

I now proceed to point out what the results of masturbation are, when the vicious habit is practised after the age at which semen begins to be secreted.

THE SYMPTOMS.—It is often difficult to obtain much certain information on the subject during the early practice of the vice. Its unfortunate victims, so long as they can practise it with impunity, or are ignorant of its consequences, can hardly be induced to make the confession. And few authors who could avoid the task, have ventured even to speculate on the frequency of a vice at once so wide-spread and so deplorable.

One author indeed, there is, whose extraordinary confessions, displaying as they do at once the terrible ease with which the vile habit can make a human being its slave, and the kind of judicial blindness which comes over its besotted victim are of no small value.

In the 'Confessions of Jean Jacques Rousseau,' we find a philosopher not only acknowledging the habitual practice of masturbation, but describing in the most forcible language the causes which tended, in his own case, to excite his sexual feelings, and calmly painting in words the way in which his excited youthful imagination exaggerated the pleasures the vice gave. He seems, however, to have been utterly unaware that the miserable mental and bodily condition, which he goes on to describe and to deplore, was in any way the natural consequence of the habit. This, perhaps, is not to be wondered at, since the very medical men he consulted did not attribute his maladies to the real cause.

Modern experience, however, and the confessions of recent patients who have sinned and suffered—as Rousseau did—give only too clear an explanation of his ailments.

The book itself is not one that I could recommend any young man to read, containing as it does much that is most objectionable and painful. But as it gives the description, by a sufferer, of that peculiar condition to which masturbation reduces a man, a few extracts may not be out of place here.

The cause to which he himself attributes the commencement of the habit has been already mentioned at p. 7 of this volume.

With a strange self-complacency, he claims for himself purity and chastity in the same breath in which he confesses the practice of the odious vice.

"Though my blood boiled with sensuality almost from my birth, I kept myself free from every stain up to the age when the coldest and most backward temperaments begin to develop."

What strikes us now as being equally remarkable is, that while confessing the habit as a *vice*, he seems still to hanker after the old excitement, and to be labouring under a moral obliquity that prevents him from seeing either its wickedness or its danger.

"Soon taking courage, I learned that dangerous substitute which deceives nature, and saves young people of such a disposition as mine from many disorders, at the expense of their health, of their strength, and sometimes of their life. This vice, which shame and timidity find so convenient, has, in addition, a strong attraction for lively imaginations. They have at their disposal, so to speak, the whole female sex, and employ for their pleasure the beauty which tempts them, without the necessity of any avowal."—Edition Charpentier, p. 146.

The ultimate results, however, are the most terrible warning. With an astonishing mixture of blindness and sharp-sightedness, the misanthropic *philosophe* pries into his mental and moral character with a despicably morbid minuteness, apparently utterly unconscious that he has furnished a sufficient cause for the very tendency he thereby dis-

plays, as well as for the weakness and follies he laments over, and for the unmanliness, the pettish feminine temper and conceit, which would make a hearty English lad shudder with disgust, and which are only indications, after all, of lower and lower depths of mental and moral debasement.

He proceeds thus to describe himself, and presents us with what may be taken, after due allowance for self-deception and falsehood, for a tolerably accurate portrait of a masturbator half-way on the road to his ruin. The description is one of the most vivid and lifelike that I have ever read.

"It might be said of me that my heart and my mind do not belong to the same person. My feelings, quicker than lightning, fill my soul; but instead of illuminating, they burn and dazzle me. I feel everything, I see nothing. I am excited, but stupid; I cannot think except in cool blood. The wonderful thing is that I have sound enough tact, penetration, even *finesse*, if people will wait for me. I make excellent impromptus at leisure; but at the moment I have nothing ready to say or do. I should converse brilliantly by post, as they say the Spaniards play at chess. When I read of a Duke of Savoy who turned back after starting on his journey to say, 'In your teeth! you Paris shopkeeper!' I said, 'That is like me!'

"I find the same sluggishness of thinking, joined with the same vividness of feeling, not only in conversation, but even while I work. My ideas arrange themselves in my brain with incredible difficulty; they circulate there dully, fermenting so as to excite me, heat me, give me palpitations; while in the midst of all this emotion I see nothing clearly, I could not write a single word—I must wait. Insensibly this great turmoil calms down—the chaos disentangles itself—each idea puts itself in its own place, but slowly and after long confused agitation. Have you ever seen the opera in Italy? while the scenes are being changed, there is a disagreeable and prolonged disorder in these great theatres; all the decorations are mixed up; you see pulling and hauling everywhere, which is postively annoying; everything seems on the point of tumbling down; however, little by little, all gets arranged; nothing is wanting, and the spectator is astonished at seeing an exquisite scene succeed the long tumult. Almost the same kind of proceeding goes on in my brain when I want to write. Could I have waited, and rendered in all their beauty the images thus painted there, few authors would have surpassed me.

"Hence arises the extreme difficulty I find in writing. My MSS., scratched, blotted, mixed up, undecipherable, attest the labour they have cost me. There is not one of them I have not had to transcribe four or five times before sending it to press. I have never been able to do anything pen in hand, with a table and my paper before me. It is

out walking among the rocks and woods, at night in bed, while lying awake, that I write in my brain; it may be imagined with what slowness, especially for a man absolutely without verbal memory, and who has never in all his life been able to learn six lines by heart. There are some of my sentences that I have turned and re-turned during five or six nights in my bed before they were in a state to be put on paper. Hence I succeed better in works that require labour than in those which must be written with a certain degree of readiness, like letters—a kind of composition of which I have never been able to catch the proper tone, and the effort at which is misery to me. I never write a letter on the smallest subject which does not cost me hours of fatigue, or if I want to write at once what occurs to me, I can neither begin nor end; my letter is a long and confused verbiage, hardly to be understood when read.

"But not only is it a labour to me to express, but also to receive ideas. I have studied men, and I think I am a tolerably good observer; yet I can see nothing of what I do see. I can hardly say that I see anything except what I recall; I have no power of mind but in my recollection. Of all that is said, of all that is done, of all that passes in my presence, I feel nothing, I appreciate nothing. The external sign is all that strikes me. But after a while it all comes back to me. I remember the place, the time, the tone, the look, the gesture, the circumstance—nothing escapes me. Then, from what has been done or said, I discover what was thought, and I am rarely deceived.

"If I am so little master of my mind while alone, it may be conceived what I must be in conversation, where to speak à propos, one must think at the same time and at a moment's notice of a thousand things. The mere idea of so many proprieties, of which I am sure to forget at least one, is enough to intimidate me. I do not even understand how a person can dare to speak in company—for at each word one ought to pass in review every one that is present; to be acquainted with all their characters and know their histories, in order to be sure to say nothing that may offend any. Certainly those who live in the world have a great advantage here; knowing better what not to say, they are surer of what they do say; yet even from them slips many an unfortunate speech. Imagine the condition of a man who falls into it all from the clouds; he can hardly talk with impunity for a minute. In a tête-à-tête there is another disagreeable, which I find worse. I mean the necessity of talking constantly; if you are spoken to you must answer, and if nothing is said, you must take up the conversation. This unendurable constraint alone would have disgusted me with society. I find no burden more intolerable than the obligation to speak at once and constantly. I do not know if this arises from my mortal aversion from all

į

subjection; but it is quite enough to be obliged to speak to make me infallibly say something foolish.

"What is more fatal is that, instead of knowing how to hold my tongue when I have nothing to say, it is just then that, to pay my debt as quickly as possible, I have a mania for talking. I try in a hurry to stammer, promptly, words without ideas, only too happy if they mean nothing at all. In trying to conquer or hide my inaptitude, I seldom fail to display it.

"I believe that this is the real explanation of why, though I am not a fool, I have often passed for one, even with persons capable of judging; all the more unhappy because my physiognomy and my eyes promise something better, and my failure makes my stupidity all the more shocking to others. This detail, which a particular instance has suggested, will not be useless to any one who follows it. It contains the key of many extraordinary performances of mine, which have been attributed to an untamed humour which I do not possess. I should relish society as well as any one, if I were not sure to exhibit myself, I do not say only to disadvantage, but as something quite different from what I am. The system I have adopted of retirement and writing precisely suits me. No one would ever have known, from my presence, what I was worth; no one would ever have suspected it."—Loc. cit., pp. 151—155.

I think this description has been seldom surpassed in hideous frankness: similar cases are almost daily brought before me, but few could or would describe their condition so fully as Jean Jaques Rosseau has done. The slowness of thought and comprehension, the timidity in conversation, the morbid quickness of feeling, the wretched dwelling on self, and diseased love of solitude, of mind as well as body, are most characteristic.

It would be well for humanity if masturbation did no more than produce even such humiliating mental effects as these. Daily experience teaches us that the evil habit is attended with the worst physical consequences also. These may as well be disposed of before we come to the last, worst, and most constant result, when the practice has become a confirmed habit.

At first we remark but little local irritation of the canal of the urethra. Pain may occur in making water, as well as a frequent desire to empty the bladder; the orifice of the meatus is frequently found red, and ejaculation, which before could only be excited by much friction, now takes place immediately; the secretion is watery, and even slightly sanguinolent, and emission is attended with spasm. A sense of weight is felt in the prostate, perinæum, or rectum, and anomalous pains are often complained of in the testes. Nocturnal emissions become very frequent, and are easily excited by slight erotic

dreams. These at first are attended with pleasurable sensations, but later the patient is only aware of ejaculation from having his attention the next morning attracted to it by the condition of his linen. In other instances the semen does not pass away in jets, but flows off imperceptibly. In some cases it makes its way back into the bladder, to pass out with the urine. Other patients will tell you that emissions have ceased to occur, but on going to stool, or on the last drops of urine passing from the bladder, a quantity of viscous fluid, varying from a drop to a teaspoonful, dribbles from the end of the penis which, if collected, or allowed to fall on a piece of glass, and exposed to the microscope, may furnish spermatozoa in greater or less numbers.

The vicious habit having impaired the growth, health, and intellect of the patient, ceases often to be voluntarily indulged in, because pleasure is no longer derived from it. The drain on the system during defecation or micturition, however, as I have stated above continues, and what depended at first on an artificial excitement, is kept up by the irritation or inflammation of the urethra, vesiculæ seminales, and spermatic ducts. The too frequent irritation of the testes causes badly eliminated semen to be secreted, which is at once emitted. The mucous membrane is more sensitive than usual (see p. 32), and acquires an irritability like that often seen in the bladder, which irritability appears to be more or less general. I may mention here that pleasurable sensations seldom attend the expulsion of ill-conditioned semen, this is probably caused by over-abuse of the sensations, which become subsequently blunted. The patient is now frequently reduced to a state of complete bodily and mental impotence.

We need not pursue the progress of the physical disease further here, as the subsequent symptoms will be more fully described in the chapter on Spermatorrhea.

Prognosis.—My opinion is that, unassisted and without medical sympathy and aid, it is not an easy matter to give up the practice. When once the vile habit has become confirmed the young libertine runs the risk of finding himself, a few years later, but a debauched old man. I have known lads and men of strong energy of will who have by their own confession failed, until they were aided by the other remedies which I shall hereafter describe. Want of resolution is, of course, one cause of failure, and where there is hereditary predisposition to strong sexual excitement, the task is often too great without good counsels and sound medical advice; and I should advise all sufferers not to rely on themselves for a cure, but at once to resort to their usual surgeon, who will give them sympathy and counsel. Let them, above all things, avoid advertising quacks.

If the struggle is severe for a youth to extricate himself from these vicious propensities, experience teaches me that it is very doubtful if,

when the practice has been much indulged in, the physical frame will ever be wholly built up again; the haggard expression, the sunken eye, the long, cadaverous-looking countenance, the downcast expression, which seems to arise from the dread of looking a fellow-creature in the face, may be carried to the grave. Undoubtedly care and attention may do much in remedying the intellectual wreck which we notice in such youths.

It will be remembered that I am describing the results of only the worst and longest continued cases. The probability is that in many who read these pages and who have at some time or other practised this vice, but have early abandoned it, the symptoms will be of the slightest kind, and a speedy cure may be promised.

Quacks are eager, of course, to represent every case as of the worst description; and I therefore wish clearly to guard myself against being supposed to mean that in my opinion all, or even most persons who have for a short time fallen into this wretched habit are doomed to all the results above described. These results are, it is true, the end towards which sufferers are tending, if they do not conquer the propensity, but if they do so before the last stage is reached, there is good hope for them yet. Nevertheless, the other extreme must be avoided, of thinking lightly of the habit, or denying that it is the cause of disease. A great change on the prognosis of these diseases has come over the profession in this respect of late, and many eminent surgeons now admit that various unrecognisable ailments are caused by these practices; and the 'Lancet,' in a series of remarkable leading articles, has (1870) suggested that all surgical authorities should discuss these ailments in the different manuals and dictionaries, instead of neglecting to treat of them as hitherto.

It is not very long ago that an able physiologist told me he believed

¹ Since writing the above a very favorable case of recovery has come under my notice. About six years ago a youth consulted me, suffering from some of the worst effects of masturbation. He has lately come to ask my opinion on the advisability of marriage. I find that, intellectually and physically, my patient has to a great extent recovered, but he still retains the peculiar physiognomy which, to me, is very characteristic. There is the hollow, sunken eye still left, although nature has filled up all other interstices. The expression has nearly become natural, but still the practised eye sees that there remains an unsettled look, very different from the calm, steady gaze of other men. In this case I was able to give my sanction to an early marriage, strict continence having always been maintained, only occasional emissions occurring, and I have little doubt that a few years of married life will still further improve the expression of the face.

This opinion was borne out by the results. I have lately (1874) met my former patient, an altered man, much improved in appearance, and we had much earnest conversation as to how he should protect his growing-up boys from falling into a condition similar to that of their father.

that one half the boy population masturbated themselves more or less, and yet that the resultant consequences were very slight. He saw much of conscience-stricken young men who consulted him; but, in his opinion, they exaggerated their sufferings, and writers on the subject had magnified the ill-effects of self-abuse. This gentleman and those professional men who agree in this view have probably only met with slight cases, for there can be no doubt that there are others, whose wretched condition, mental and bodily, can hardly be exaggerated.

There are many false cases, no doubt, which are often misunderstood and have misled even able professional men, but it is not less certain that there are true cases. I could speak, from my own experience, of the many wrecks of high intellectual attainments, and the foul blot which has been made on the virgin page of youth—of shocks from which the youth's nervous system will never, in my opinion, be able to rally—of maladies engendered which no after course of treatment can altogether cure, although surgery may do much to alleviate symptoms as they arise.

One of the chief causes which impede recovery, and interfere with the action of any remedies, is the mental anguish arising from the horror and remorse which the patient experiences. This has been well put by Tissot, who wrote a book on 'Onanism' a century ago. His observations are as true now as then. He says:

"When the veil is removed, the picture of their conduct is brought before them in all its hideousness; they find themselves guilty of a crime, of which Divine justice wishes not to supersede the penalty, and which it punishes by death—of a crime reputed as a great crime, even by heathens:

> 'Hoc nihil esse putas? Scelus est, mihi crede sed ingens Quartum vis animo concipis ipse tuo.'

"This distress cannot be alleviated by the sympathy of others. Shame obliges the patient to hide his crime from every one, till some unbearable torment force a revelation. Many, indeed, die because they have not been able to muster courage to reveal the cause of their misery. I often receive letters saying, I would rather die than appear before you after such an avowal.

"Feeling that he must be held in detestation by society if his disgrace were known, the idea pursues him incessantly. 'It appears to me,' says one of my correspondents, 'that every one reads in my face the infamous cause of my disease, and this idea renders society unbearable;' and what is most frightful, I have no pretext of justification or motive for consolation."

I need hardly say that, instead of fostering in the least this morbid feeling, it is the duty of the surgeon to assure his patient of sympathy and cordial help, and to do all in his power to remove these delusions, for happily in many cases these ideas are but delusions.

Treatment.—In the earlier stages of this mental and bodily debility the services of the surgeon may be of great benefit. If a bougie be introduced into the urethra, and the treatment alluded to at p. 32 be employed, the patient will find it much easier to exercise self-control (which is what is wanted). If he will aid the surgical treatment, by taking gymnastic exercise, and following the other rules laid down above, pp. 24, 32, a favorable result may be expected. It is in the earlier stages that advice should be sought, instead of waiting until dementia has occurred, or the brain become disorganised. Those who treat mental diseases are not consulted sufficiently early to admit of recourse being had to the treatment here recommended; they see the effects when too often the mischief is irremediable: and it may be from the impression thus produced that sufficient attention has not been as yet given to surgical treatment in the incipient forms of insanity, brought on by this malady.

If, however, a patient will not attempt self-control, mental as well as physical, and if,—instead of consulting a qualified medical man,—hearing from him a statement of the consequences of the practice,—strictly following out the treatment recommended,—and giving up the vile habit,—he should abandon himself to humiliation and despair, the downward course may be very rapid and fatal. When this frame of mind has completely got possession of a man, the step to insanity in its worst and most hopeless forms is alarmingly short.

SECT. III.—INSANITY ARISING FROM MASTURBATION

That insanity is a consequence of this habit is now beyond a doubt.¹ The subject has recently been thoroughly investigated by Dr Ritchie, from whose able treatise, entitled 'An inquiry into a frequent cause of insanity in young men,' I have condensed the following particulars:

The Cause.—Dr Ritchie thus quotes from a work by Esquirol, entitled 'Des Maladies Mentales:'—" La masturbation, ce fléau de l'espèce humaine, est, plus souvent qu'on ne pense, cause de folie, surtout chez les riches." And again—" La masturbation, dont nous avons parlé sous un autre rapport, est signalée dans tous les pays, comme une des causes fréquentes de folie; quelque fois c'est le prélude

¹ The connection between insanity and extravagant sensual desire is alarmingly close, as appears from many modern investigations, especially with regard to the central portion of the cerebellum.

Deslandes has remarked that, "in proportion as the intellect becomes enfeebled, the generative sensibility is augmented."

de la manie, de la démence, et même de la démence sénile; elle jette dans la melancholie, conduit au suicide. Elle est plus funeste aux hommes qu'aux femmes," &c.

CLASS OF PERSONS AFFECTED.—"It might be expected," says Dr Ritchie, "that these cases would chiefly occur in members of families of strict religious education. Experience indorses this expectation; and facts also show that those who from this cause become insane have generally, to all appearance, been of strictly moral life, and recognised as persons who paid much attention to the forms of religion. As will be afterwards more fully stated, it is frequently observed, especially in the acute attack resulting from this cause, that religion forms a noted subject of conversation or delusion."

PREMONITORY SYMPTOMS.—"The parent, after her son (the only child it may be) is taken to an asylum will tell you that his insanity cannot be accounted for. He has been so well conducted, so quiet and studious, not seeking the company of the gay, the idle, and the thoughtless, but remaining quietly at home rather than joining the social amusements of those of his own age. Further inquiry may elicit that he has been of good abilities, and it may be, clever in his occupation; that he had few friends, and rather shunned the society of those of the other sex. Had he been other than he was, some cause might have been found in the irregularities of life to cause insanity in one scarcely beyond boyhood's years; but in such a quiet lad, and so carefully brought up, she is unable to suppose a cause. Then she may tell you that for some time past a gradual alteration has been going on; he has changed not only in manner but in appearance; he has become so prevish and irritable, so reserved in his conversation, so apathetic in manner, so slovenly in dress, so contradictory and so uncertain in his actions, so hesitating, first determining on one thing, and before he could execute the course determined on changing to some other, and has shown such a want of self-reliance. That quite recently he has grown more and more apathetic, more slovenly in dress, paying less attention to cleanliness, and become slower in his actions; that he is now not only irritable in his temper, but is at times violent; that he does things by 'fits and starts,' is impulsive, deliberating long, and then suddenly hastens apparently to carry out his intention; and has become so stupid-looking and lost, and incapable of taking care either of himself or his business; and all this has occurred without any apparent cause, except it may be his 'studious habits.' At last he can be borne with no longer; he is unmanageable in a private house, and is obliged to be removed from his home."

GENERAL SYMPTOMS.—"On entering an asylum for the insane, especially if it be one receiving patients from the middle as well as from the lower class of society, there is one group of inmates which

may arrest the attention of the visitor from the contrast presented to the excited persons around him, on the one hand, and to those who are convalescent on the other. Engaged in no social diversion, the patients of this group live alone in the midst of many. In their exercise they choose the quietest and most unfrequented parts of the airing grounds. They join in no social conversation, nor enter with others into any amusement. They walk alone, or they sit alone. If engaged in reading, they talk not to others of what they may have read; their desire apparently is, in the midst of numbers, to be in solitude. They seek no social joys, nor is any wish for fellowship evinced.

"The pale complexion, the emaciated form, the slouching gait, the clammy palm, the glassy or leaden eye, and the averted gaze, indicate the lunatic victim to this vice.

"Apathy, loss of memory, abeyance of concentrative power and manifestation of mind generally, combined with loss of self-reliance, and indisposition for or impulsiveness of action, irritability of temper, and incoherence of language, are the most characteristic mental phenomena of chronic dementia resulting from masturbation in young men.

"As in diseases of an exhaustive nature we find that the cutaneous secretion is poured forth abundantly, so in the cases occupying our attention the perspiration breaks forth on the slightest exertion. This relaxed condition of the perspiratory system is especially marked in the palms, and the exception is to find these dry in a masturbator; for generally a damp, or cold, clammy perspiration is constantly present, and makes it particularly disagreeable to take the hand of one of these persons. The sub-integumentary layer is but sparingly supplied with fat, which is remarkable, considering the little exercise these patients, if left to their own guidance, would take.

"To conclude this description, it is only necessary to add that the gait is slovenly or slouching, that the gaze is downcast or averted, and when addressed, the masturbator does not look the speaker openly in the face while he replies, but looks to the ground or beyond the questioner."

DIAGNOSIS.—"The physical system is, as a rule, but indifferently developed. The muscles are small, soft, and flabby; the body is generally emaciated, the adipose tissue being but feebly stored up; the complexion is variable, but, though occasionally flushed, is, as a rule, pale; the gaze is not constantly averted, but in all the cornea will be found dull and the expression inanimate.

"Excitement, with delusion of a melancholic cast, and frequently, if not in most cases, of a religious tendency, combined with a suicidal or a self-mutilating inclination, occurring in a thin or emaciated man, under the age of twenty-five (who does not present evidence of organic cerebral disease), of generally pale complexion and averted gaze, but always with the dull cornea and expressionless countenance, would lead to the diagnosis of the cause."

Prognosis.—"This condition does not continue many days. The cause being discontinued, the stupor becomes less intense, the inclination for repose more marked, and the sleep more natural and refreshing; the sensations of hunger and thirst are once more experienced; the secretions are more active; the cleanliness of habit is attended to; the dress is looked after; the obstinacy decreases, and gradually an inclination and the ability to converse return, and at last, though slowly, the health of mind and body is restored. Such, in favorable cases, is the result, but it too often happens that convalescence is arrested, and that the condition of ordinary or chronic dementia becomes established, and with it the prospect of recovery diminishes."

Relapses.—"Remonstrate with these victims after they are received into an asylum, whilst reason is still not quite destroyed, and they will agree with your remarks. They will express their thankfulness that they have yet been spared some portion of reason; they will express their deep abhorrence of their conduct; they will shed tears of apparent penitence; and yet the old habit will be relapsed into; and when they think themselves removed beyond control, they will once again indulge in their self-destroying practice. The determination to conduct themselves in the pure course is wanting, and in this there is evidence of the pernicious energy-sapping cause.

"Few incidents are more capable of occasioning annoyance and disappointment to the physician, and none more calculated to excite his pity and regret, than to find the recovery he regarded as certain, marred and prevented, or delayed, by the preventible act of the patient himself. This cause of relapse is but little believed in, except by those who are intimately acquainted with the habits of the insane; but regarding it as possible, many an unexpected and unaccountable relapse can be readily explained. When any tendency to indulgence has been observed in the early stages of mania, the prognosis ought to be stated in well-weighed words. The fact of a patient, neither epileptic nor the subject of paralysis (although in young men the former is more probable), who, when put to bed was progressing favorably, being in a lost or much confused state when he got up on the succeeding morning would be significant of some cause acting during the night. In the absence of excitement or a fit, the probability of this cause ought not to be forgotten."

TERMINATION OF CASES.—"In acute or recent dementia, the condition of the patient is most pitiable. His existence is, for a time, merely vegetative, and in well-marked cases the obstinacy of disposi-

tion is almost the only indication of a mental action, and the mental origin of this may even be doubted. The sufferer becomes quite silent, and is lost and unable to take care of himself. He becomes statuesque, and extremely obstinate. He resists passively, and occasionally actively. If he be in bed, he will not rise to be washed or dressed. If up, he will not retire at proper time to bed, or allow himself to be undressed. Everything requires to be done for him. Cleanliness is neglected, and his dress unattended to. He makes no effort to speak, and when addressed, although conscious, does not appear to comprehend what is said. He will not feed himself.

"How earnestly do those who know what the future will bring to such a one repeat these feeling words of Ellis—'Would that I could take its melancholy victims with me in my daily rounds (at Hanwell Asylum), and could point out to them the awful consequences which they do but little suspect to be the result of its indulgence. I could show them those gifted by nature with high talents, and fitted to be an ornament and a benefit to society, sunk into such a state of physical and moral degradation as wrings the heart to witness, and still persevering, with the last remnant of mind gradually sinking into fatuity, the consciousness that their hopeless wretchedness is the just reward of their own misconduct.'"

TENDENCY TO COMMIT SUICIDE.—On this point Dr Ritchie says: "As regards suicide, the greater frequency of this occurs in those whose cases assume a melancholic character with the excitement.

"Although it will be found that various supposed causes may be alleged, still I believe that in the greater proportion of such cases the immediate exciting cause is the feeling of disgust at, combined with alarm for, the consequences of, the patient's criminal conduct. Hence it is that feelings of their own unworthiness arise in such patients, and, under the impression that they have committed the unpardonable simhave sinned against the Holy Ghost—and that a future world presents no hope of joy or happiness for them, as they are excluded from it by their past conduct, they frequently make attempts to terminate their own existence. Such an act is occasionally incited by hallucination of the aural organ; but I have not found that suicide is so frequently to be traced to this, as in other cases of mental aberration depending on other causes."

Self-mutilation.—"Another peculiarity of these cases is the tendency frequently exhibited to self-mutilation, and, as reports show, the attempts are not unfrequently successful. Thus is indicated an unsound reasoning power, the visiting on the supposed offending organs the faults of the ill-regulated mind."

¹ I was recently called upon to sign a certificate, for a gentleman of high standing

As Dr Ritchie states, the delusions in many instances assume a religious character, and hence it is that it is repeatedly found that the cause of the sufferer's condition is supposed to be religion. The delusions of this class generally are of the melancholic character stated above: fears that eternal happiness is lost—that they have no hope beyond the grave—that they have committed an unpardonable sin—or that they are unworthy to live.

From the true cause of the mental condition of these cases not being understood, the meaning of these reproaches for past conduct cannot be comprehended; and it is easily explained why a young man of apparently blameless life making these self-accusations, is regarded by his friends as suffering from acute religious feelings, whereas remorse or fear has generally more to do with his condition than true religious impressions or conviction.

It is probable that some of those young men whose insanity has become developed through revival meetings, of which there have been many instances, would, on close inquiry, be found to belong to the class now occupying our attention.

In some patients, rash and even criminal acts are the result of the idea that an atonement may thereby be made for the sin committed. The attempt to injure the genitals and similar extravagances often, I believe, arises from such insane fancy. While, on the other hand, extravagant masturbation or the tendency to commit rapes or unnatural crimes may be in some cases traced to the not less insane desire the sufferer feels to test, and prove to himself, or others, that he is not impotent.

TREATMENT.—The long extracts I have given from Dr Ritchie's pamphlet may testify to the high value which I set on this acute observer's remarks on the disease; I differ from him, however, somewhat as to the prognosis and treatment, and am far more sanguine than he is of the success which may be anticipated from appropriate management.

in his profession, who was himself willing to enter an asylum. His case was a very sad one, and exemplifies the ideas a patient, in this state, forms of his own ailments. His history, which, however, I gleaned from him with some difficulty, was as follows:—Early in life he contracted the habit of masturbation, nevertheless he married, and lived tolerably happily with his wife; and his marital duties were performed, he assured me, in a satisfactory manner. He became, however, depressed, his conscience told him that he had done wrong in abusing himself early in life, and he determined as a punishment, that he would cut away the testes. This he effected,—the parts healed, and the patient entered an asylum, which he subsequently left. At the period I saw him, he was in what, I suppose, I may call a lucid interval. He still regretted most bitterly his early sins, and was satisfied that he had not been justified in mutilating himself. He was conscious that he was again losing his self-will, and felt that he ought to be watched, lest he should further injure himself (I was told he had attempted his life).—W. A.

Still, when dementia has set in, I quite agree with Dr Ritchie, that the case assumes a very serious form, and then passes from the surgeon's care into the hands of those who attend to such cases. Kind care and domestic attentions are all that can be suggested to soothe the latter days of these victims of ignorance or vice.

In a former edition of this book diffidence on my part prevented my giving any positive opinion on this subject, and I preferred quoting the opinions of Dr Ritchie, who had then recently published his pamphlet.

Further experience enables me (while allowing the present chapter to remain) to give my personal opinion on this most important question, and I confidently assert that, at least in the earlier stages of dementia caused by self-abuse, the greatest service can be done to the patient. Even in the more confirmed cases of insanity arising from this cause, I should not be disposed to give up the hope of effecting a cure, instead of consigning them to confinement in a lunatic asylum, and I trust my personal experience may induce those who specially devote their attention to mental diseases to give my plan of treatment, recommended at page 31, a fair trial. One thing I can confidently promise, that if my advice does not cure the confirmed case, it cannot do any harm. If it enables but one poor sufferer to be rescued from the madhouse, it deserves a trial, and I think my professional brethren will often find it succeed in cases previously considered hopeless.

SECT. IV.—PHTHISIS ARISING FROM MASTURBATION

The attention of physicians has been of late years directed to this In the year 1862, Dr E. Smith read a paper before the Med. Chir. Society entitled "A Statistical Inquiry into the prevalence of numerous conditions affecting the constitution in one thousand phthisical persons when in health." In this paper, he stated that 11.6 per cent. of the males had committed sexual excesses; 18.2 per cent. had been addicted to masturbation, and 22 per cent. had suffered from involuntary emissions. I can, from my own observations, fully corroborate his statements, though whether the phthisical cachexia is to be regarded as a cause or an effect of sexual excess I am not sure. Delicate constitutions, with a consumptive tendency, are often very susceptible of sexual excitement. They are consequently peculiarly liable to nocturnal emissions, and to the temptation to commit excesses. Coupled with this special tendency, there is often in such persons a high spirit, and a carelessness of consequences, which will not yield to any slight indisposition. It may, perhaps, often be, in such instances, as much the constitution which predisposes to excesses, as the sexual

excesses which induce the delicacy of constitution. There can be, however, no doubt that these excesses are doubly fatal to such idiosyncrasies. It is well when the surgeon or physician is able, early in life, to impress on a patient with marked family predisposition to phthisis the imminent risk he incurs in allowing the sexual feelings to run riot. I am convinced that it is from such preventible causes as these that the hopeful career of many of our most promising youths and hard-working students comes to a sad and early end. It should be here noticed, and the fact will be more fully considered in the latter portions of this volume, that a lavish expenditure of the vital fluid semen is most detrimental to a young man's constitution. Whether this arises from masturbation, sexual excesses, or very frequent nocturnal emissions, the effects will be very similar. If we here treat of masturbation, it is because this vice is one more readily and easily practised and repeated by young men, and to it, therefore, more frequently than to the other causes, it is that the evil consequences which we are now considering are due.

THE Prognosis is favorable if the patient is seen early, and the treatment conformable to the causes of the complaint adopted. I have seen many young men in consultation with some of the leading authorities of London, and have rescued them from what has been considered a very dangerous condition. The ordinary remedies for phthisis are of no avail unless we at once check the cause of the complaint, namely, sexual excesses. When this has been done, everything that can improve the health, or enable the system to rally, will, of course, be beneficial, and the observations I have already made, page 67, on the treatment of insanity apply with equal force to phthisis. I shall, therefore, not repeat them, but merely express my conviction that we can, in a large number of cases, afford relief and rescue the sufferers from imminent danger.

SECT. V .- AFFECTIONS OF THE HEART ARISING FROM MASTURBATION

I have seldom met an instance of sexual excess in which complaints of the heart's action have not been made. Patients assert that they can make no exertion without suffering under palpitation. In order to satisfy myself that these affections of the heart were not organic, I have met in consultation most of the ablest men in London, and we have come to the conclusion that these patients are suffering from functional diseases of the heart, and consequently the prognosis becomes much less serious, provided, as I stated in the preceding

70 AFFECTIONS OF THE HEART ARISING FROM MASTURBATION

chapter, the patients will forego these excesses, and treatment is prescribed calculated to enable them to gain mastery of their will and to exert self-control. As soon as this power of exercising self-restraint is gained, the usual tonics, stimulants, and sedatives will exert the beneficial influence proper to them, though they may have been taken previously without any benefit. It is in this that the advantages of the modern treatment for functional diseases of the heart among young men consist, and the results achieved fully bear out my favorable prognosis of such cases.

THIRD PERIOD—ADULT AGE

THE FUNCTIONS AND DISORDERS OF THE REPRODUCTIVE ORGANS IN THE ADULT

THE following pages will, for the purpose of greater clearness and conciseness, be divided into two parts. In the first I propose to enter on general considerations relating to the sexual condition of the adult, and in the second, to refer, with rather more minuteness, to the special constitutent parts and necessary requisites of the sexual act, viz., erection, ejaculation, and emitted semen.

FIRST DIVISION

GENERAL CONSIDERATIONS ON THE SEXUAL CONDITION OF THE ADULT

VIRILITY

The commencement of adult life is a period in human existence less marked, perhaps, but not less real, and hardly less critical, than that of puberty. The general growth of the body is complete. The immature limbs of youth are converted into the firm and elastic frame of the man. The mental powers should be at their highest. The will and judgment should command, and yet be enlivened by the remains of youthful energy and enthusiasm. And, what is more to our present purpose, the virile powers, whose active development commenced at puberty,—now at last matured,—should be fit and ready to be exercised in obedience to the Creator's command to "be fruitful and multiply."

At a period differing in every man's life—but occurring generally

somewhere between twenty and thirty—the individual is conscious, if he has lived on the whole a tolerably chaste life, of a great change in those sexual tendencies of which he has been frequently conscious before. They are no longer the fitful fancies of a boy, but are capable, he feels, of ripening at once into the steady rational passion, or rather purpose, of the full-grown man. The natural longing is there still, but it is no longer towards mere sensual indulgence (it will be remembered that I am speaking of the continent man) but is deeply tinctured with the craving for wife—and home—and children.

Still, it is not to be denied, that—however purified and fortified by these additional elements—the sex-passion in a healthy continent adult is very powerful; very different from the sickly cravings of the voluptuary, or the mad half-poetical desires of a boy, but requiring even the adult's utmost efforts to control, and his best wisdom to guide, when he is able at last lawfully to indulge it.

My object, at present, will be to consider these sexual desires in the adult with a view to furnish, if I can, some hints and suggestions which may be not without their use, in enabling the individual to judge wisely, and decide rightly in some of the most important crises of his life.

First let us recall the real physical character of the sexual desires. "They are," says Carpenter, "in man, prompted by instinct, which he shares with the lower animals. This instinct, like the other propensities is excited by sensations, and these may either originate in the sexual organs themselves, or may be excited through the organs of special Thus, in man it is most powerfully aroused by impressions conveyed through the sight or touch; but in many other animals, the auditory and olfactory organs communicate impressions which have an equal power; and it is not improbable that in certain morbidly excited states of feeling, the same may be the case in ourselves. Localized sensations have also a powerful effect in exciting sexual desires, as must have been within the experience of almost every one; the fact is most remarkable, however, in cases of satyriasis, which disease is generally found to be connected with some obvious cause of irritation of the general system, such as pruritus, active congestion, &c. The seat of this sexual sensation is no longer supposed to be in the cerebellum generally.

¹ M. Flourens removed the cerebellum from cocks, yet they exhibited sexual desire—but were incapable of gratifying it. Among animals, there is no proportion to be observed between the size of the cerebellum and the development of the sexual passion. On the contrary, many instances may be mentioned in which a larger sexual appetite co-exists with a smaller cerebellum; e.g. rays and eels, which are among the fish that copulate, have no laminæ on their almost rudimental cerebella; and codfish, which do not copulate, but deposit their generative fluids in the water,

but probably in its central portion, or some part of the medulla oblongata.

Roubaud considers that as venereal desires are instinctive in animals at the rutting season, so also are they in young human males, at puberty, after long periods of continence, or after intervals of healthy rural repose. Later in life these desires, he thinks, answer to no appeals but those of sensation or imagination. It is the sense of smell which principally affects the lower animals, the odour of the sexual organs of the female possessing an extraordinary attraction for the males of the breed; but all the senses have power to influence the desires of man. "There is no doubt," adds this author, "that mere volition, without the aid of the senses, is adequate to engender venereal desires. Such is the force of imagination, that without reference to instinct and sensation, it is competent by itself to produce not only venereal erethism, but even the very act of ejaculation."

It is to be expected that, at the time when the man is physically in the fittest state to procreate his species, nature should provide him with a natural and earnest desire, a stimulus, as it were, to the commission of the act which he is now fully competent to perform, not only without injury, but often with positive advantage to himself. This physical condition is thus described in the 'Encyclopædia of Anatomy:'

"During the period of excitement, spermatozoa are becoming rapidly adult, the testicles and the ducts are full of semen, the individual is in the condition of a fish with a full milt, or a bird or stag with enlarged testes. He now instinctively seeks the society of women. Intercourse with females increases his excitement, and all is ready for the copulative act." ("Encyclopædia of Anatomy," Art. "Vesiculæ Seminales.")

These, then, are the physiological conditions of the adult male. He

have comparatively well-developed cerebella. Among Amphibia, the sexual passion is apparently very strong in frogs and toads; yet the cerebellum is only a narrow bar of nervous substance. Among birds there is no enlargement of the cerebellum in the males that are polygamous; the domestic cock's cerebellum is not larger than the hen's, though his sexual passion must be estimated at many times greater than hers. Among Mammalia the same rule holds; and in this class the experiments of M. Sassaigne have plainly shown that the abolition of the sexual passion by removal of the testes in early life is not followed by any diminution of the cerebellum; for in mares and stallions the average absolute weight of the cerebellum is 61 grains, and in geldings 70 grains, and its proportionate weight compared with that of the cerebrum is on an average as 1:6:59 in mares, as 1:5:97 in geldings, and only as 1:7:07 in stallions. On the whole, therefore, it appears advisable to wait for more evidence before concluding that there is any peculiar and direct connection between the cerebellum and the sexual instinct or sexual passion.—Kirke's Handbook of Physiology, 7th edition, by M. Baker, p. 530.

feels that manhood has been attained, he experiences all those mysterious sensations which make up what we call VIRILITY.

CHAP. I.—VIRILITY

Lallemand thus describes the normal condition of the healthy adult:

—"Virility, derived from the Latin word vir, a man, is the distinctive characteristic of the male; it is the condition upon which essentially depends the preservation of the species. Is this deep and moral sentiment the artificial result of education, of social convenance, of institutions, &c.? Certainly not! for it is identical in all men, among all people, it is even more energetic, or at least more potent among the least educated, and the least civilised. It depends then evidently on the instinct of propagation, the most powerful feeling of all, after that of self-preservation." (Vol. iii, p. 124.)

This feeling of virility is much more developed in man than is that of maternity in woman. Its existence, indeed, seems necessary to give a man that consciousness of his dignity, of his character as head and ruler, and of his importance, which is absolutely essential to the wellbeing of the family, and through it, of society itself. It is a power, a privilege, of which the man is, and should be, proud—so proud that he should husband it, and not squander or debase it. Too many a man, with a recklessness that can only be attributed to ignorance of its value, exhausts or defiles this noble prerogative of his manhood, a possession as precious in its own way as that of chastity—"The fayrest vertue, far above the rest."

SECOND DIVISION

THE SEXUAL ACT, ITS PHYSIOLOGY AND DISORDERS

We come now to the second of the main divisions of this part of the work. And first of all I propose to consider the several conditions and acts which constitute sexual intercourse. 1st, I shall describe them as they occur in health or normally; and 2ndly, I shall point out in what way they may occur abnormally, preventing or interfering with the complete performance of the copulative act.

To the physiologist, but more especially to the medical man engaged in practice, a knowledge of the more intimate causes of potence or impotence is most important, and hardly less so to the thousands who suffer in one way or another, from some of the many causes that may interfere with, or entirely prevent, the exercise of the reproductive functions.

To the due performance of copulation three things are indispensable—namely, 1st, erection of the penis; 2nd, the power of emission or ejaculation; and 3rd, a due amount of well-formed semen; all which it will be necessary to treat of in the three following chapters.

CHAP. I.—ERECTION

In pursuance of the plan which we have hitherto followed, we shall divide the chapter into two parts, in the first describing the normal act and its essential conditions, and in the second the disorders to which erection may be subject.

Size of Penis.—But before dealing with the subject of erection, I may say a few words on the size of the intromittent organ. In the negro it is proverbially large, but, as is the case also where the same peculiarity exists in a white man, the penis does not proportionately increase in size on erection taking place.

Size, I may repeat, is no sign of vigour. One of the first characteristics of the perfect athlete of classic times was unusually small though well-shaped genital organs. Indeed, as I have before said, a large, flaccid penis is not unfrequently a result and an indication of masturbation having been indulged in to a dangerous extent. Veterinary surgeons, it is true, condemn a horse with an abnormally small sheath, as likely to be delicate in constitution. The rule, however, does not apply to human beings, though, undoubtedly, a shrivelled, atrophied condition of the organ may in addition to other signs become a pretty sure sign of the existence of partial or entire impotence.

There are few questions more frequently put by patients than "Do I not suffer under a diminished or diminishing size of penis?" In nine cases out of ten there is no cause for alarm whatever. A nervous patient in bathing has seen another man with a larger organ, or from some other cause fancies that his powers must necessarily be deficient, because he thinks the organ does not possess what he considers the usual dimensions. The size of the penis varies greatly, and it has been a great source of consolation to many patients to be told that its efficiency bears no relation whatever to its size. A small penis, indeed, is often a more efficient organ than a large and massive one. A small penis, it should also be remembered, when in a state of erection often exceeds in size one which is larger while in a quiescent state. An abnormal smallness of the penis can sometimes be successfully treated, as in the instance mentioned in a subsequent page. There as the pressure of the truss was taken off the penis regained its normal

size. Marriage also will frequently increase the size of the organ. Circumcision in cases where the prepuce is very narrow will tend to the same end. In most cases, however, no treatment whatever is required, and the patient may be assured that the due performance of marital duties are fully compatible with a moderate-sized organ.

PART I

NORMAL ERECTION, OR CONDITIONS ESSENTIAL TO IT

This external sign of virility, as Buffon calls Erection, depends chiefly on the existence in the organ of certain tissues known as *erectile tissues*. Let us see what the most recent anatomical investigations have taught us regarding these important structures. The following remarks are extracted from the seventh edition of Kirke's 'Physiology,' by M. Baker.

"Executive Tissues.—The instances of greatest variation in the quantity of blood contained at different times in the same organs are found in certain structures which, under ordinary circumstances, are soft and flaccid, but at certain times receive an unusually large quantity of blood, become distended and swollen by it, and pass into the state which has been termed erection. Such structures are the corpora cavernosa (see diagram page 104) and corpus spongiosum of the penis in the male, and the clitoris in the female, and, in a less degree, the nipple of the mammary gland in both sexes. The corpus cavernosum penis, which is the best example of an erectile tissue, has an external fibrous membrane or sheath, from the inner surface of which numerous fine lamellæ pass into the interior of the body, dividing its cavity into small compartments, which look like cells when they are inflated.

"Within these is situated the plexus of veins upon which the peculiar erectile property of the organ mainly depends. It consists of short veins, which very closely interlace and anastomose with each other in all directions, and admit of great variation of size, collapsing in the passive state of the organ, but, for erection, capable of an amount of dilatation, which exceeds beyond comparison that of the arteries and veins which convey the blood to and from them. The strong fibrous tissue lying in the intervals of the venous plexuses, and the external fibrous membrane or sheath with which it is connected, limit the distension of the vessels, and during the state of erection give to the penis its condition of tension and firmness. The same general condition of

vessels exists in the corpus spongiosum urethræ, but around the urethra the fibrous tissue is much weaker than around the body of the penis, and around the glans there is none. The venous blood is returned from the plexuses by comparatively small veins; those from the glans and the fore part of the urethra empty themselves into the dorsal vein of the penis, those from the corpus cavernosum pass into the deeper veins which issue from the corpora cavernosa at the crura penis, and those from the rest of the urethra and bulb pass more directly into the plexus of the veins about the prostate. For all these veins one condition is the same, namely, that they are liable to the pressure of muscles, when they leave the penis. The vena dorsalis penis may be compressed by the uniting tendons of the ischio-cavernosi; the crura penis and the veins issuing from them are under the same muscles, and the veins of the bulb are subject to the compression of the bulbo-(See Krause, lxxx, 1837; Köbelt, cxxvii and xxv, 1843, p. 58.)

"Erection results from the distension of the venous plexuses with blood. The principal exciting cause in the erection of the penis is nervous irritation originating in the part itself, or derived from the brain or spinal cord. The nervous influence is communicated to the penis by the pubic nerves, which ramify in its vascular tissue, and Günther (xcvi, 1828, p. 364) has observed that, after their division in the horse the penis is no longer capable of erection. It affords a good example of the subjection of the circulation in an individual organ to the influence of the nerves, but the mode in which they excite a greater influx of blood is not with certainty known.

"The most probable explanation is that offered by Professor Kölliker,² who ascribes the distension of the venous plexuses to the influence of organic muscular fibres, which he finds in abundance in the corpora cavernosa of the penis, from the bulb to the glans, also in the clitoris and other parts capable of erection. While erectile organs are flaccid and at rest, these contractile fibres exercise an amount of

1 "The glans penis," says Köbelt, "is the principal point of reunion of the sensitive nerves of the virile organ, no other part which it regulates can be compared with it in this respect. In respect to richness in nerves, the glans penis yields to no other part of the economy, not even the organs of sense." (Köbelt, loc. cit., p. 10.)

² Kölliker says, "Erection is caused, as I have shown ('Würzb. Verh.,' Bd. ii), by a relaxation of the muscular elements in the *trabeculæ* of the cavernous and spongy bodies, and of the *tunica media* of the arteries of those parts, in consequence of which the tissue, like a sponge which has been compressed, expands, and becomes filled with blood. The rigidity ensues so soon as the muscles are completely relaxed and the sinuses filled to the utmost, without there being any necessity that the return of the blood should be impeded and the circulation stopped. It ceases when the muscles again contract, the venous spaces become narrowed, and the blood is expressed from them."

pressure on the plexuses of vessels distributed amongst them sufficient to prevent their distension with blood. But when, through the influence of their nerves, these parts are stimulated to erection, the action of these fibres is suspended, and the plexuses thus liberated from pressure yield to the distended force of the blood, which, probably, at the same time, arrives in greater quantity, owing to a simultaneous dilatation of the parts; and thus the plexuses become filled, and remain so until the stimulus to erection subsides, when the organic muscular fibres again contract, and so gradually expel the excess of blood from the previously distended vessels."—Kirkes, p. 142.

In speaking of the nerves, Müller says: "The corpora cavernosa of the penis and urethra are provided in greater part with nerves of organic life, whereas the glans penis, very sensitive as it is, receives nerves exclusively sensitive."—Müller, 'Ueber die Organischen Nerven der erectilen Münnlichen Geschlechts-organe,' &c., p. 44.

"The arteries of erectile organs present a special disposition, which strikes one at once. At first (as Müller has shown) the arterial trunks in the bulb and at the roots of the corpora cavernosa do not divide in the usual way into dichotomic branches, but are surrounded on all sides by bunches of vessels which arise, from three to ten in number, from a short common trunk. These vessels are not mere short diverticula, but traverse for some disance the large sinuses of the central portion of the corpora cavernosa and of the bulb, and penetrate, after numerous subdivisions and anastomoses, especially about the periphery, the muscular trabeculæ. After traversing these fibres, the arteries pass to the surface through slit-like openings; but from their origin to their termination in the muscular fibres, the vessels from the arterial branches are twisted on themselves in abrupt and closely compressed spiral folds, interlacing, entwining, and anastomosing, so as to form a sort of vascular tangle, and this, unlike any simple flexions which a slight distension suffices to obliterate, persists during even complete erection, and closely resembles a beautiful network."— Rouget, Professeur agrégé à la Faculté de Médecine de Paris, 'Journ. de Physiologie,' tom. i, p. 331.

Köbelt describes erection as follows:—"Thus, on the one hand, the glans penis, endowed as it is with sensibility, and, on the other hand, the *irritable* muscular apparatus of the bulb, act and react upon one another as reciprocal exciting causes. The glans penis, when excited, reacts on the bulb, which sends more and more blood—the exciting material—towards it. Each new rush of blood to the glans exalts its sensibility; the bulbo-cavernosus muscle, *irritated* in its turn, progressively accelerates its contractions, in order to satisfy the requirements of the glans, which also increases more and more, till at last,

by alternate actions, the entire apparatus reaches its highest point of excitement. At this moment a new series of secondary reflex phenomena is suddenly produced between the glans penis and the muscles which produce evacuation of the vesiculæ seminales, these muscles become excited, a spermatic ejaculation is produced, and at this point the currents of exchange cease, the special function is accomplished, and the organ, as soon as nature has gained her end, returns to its ordinary state of repose and vegetative life."—Köbelt, loc. cit., p. 39.

Rouget has lately given up his views as to the way in which erection takes place. Contraction commences in front of the bulb and the root of the cavernous body, or at least at their margin. He supposes that "the distension of the vesiculæ seminales is the first cause of natural erection. The latter commences by a species of spasm, which, developing itself in the muscular apparatus of the generative system, is transmitted de proche en proche to the bundles of the root of the cavernous body and the bulb, and tends to propagate itself to the whole extent of the penis. The obstacle to the course of blood in the veins of the plexus of Santorini, imposed by the first muscular contractions, has for its immediate effect the dilatation of the areola of the cavernous bodies by the blood; and the tension of the liquid struggles energetically against the muscular tonicity up to the moment when, ejaculation being accomplished, spasm ceases little by little in the same situations where it began; the circulation then becoming free, muscular contraction gets the better of the tension of the blood, and partially drives on this liquid. The organ itself then gradually resumes its natural dimensions."

These researches seem to demonstrate that the muscular contractions, the effect of which is to hamper the venous circulation, play a considerable part in the phenomenon of erection; nevertheless, they do not play the principal part, and should not be considered otherwise than as auxiliaries to the act. The first phenomenon observed—that by which erection commences, and without which it could not manifest itself—is the dilatation of the little arteries and veins under the influence of the vaso-motor nerves. These are the erector nerves (nervierigentes); they arise from the sciatic plexus, and are distributed with the vessels on the side of the bladder and prostate, as far as the membranous and bulbous portion of the urethra, where we cease to follow them.

At this point of their course we observe a certain number of ganglionic cells on the *continuité* of the nervous filaments.

The course of erection, I may add, is from the base of the organ towards the glans, and the progressive return to the normal condition seems to be in the opposite direction. After seminal emission the

erection soon diminishes, and the return of the organ to its normal bulk occupies less time than its previous erection. The sluices of the venous blood are now suddenly opened. The elastic reaction of the immoderately distended partitions and membranes presses upon the blood in contact with them. The non-striated muscular fibres probably add to this propulsive force. The excess of blood is, therefore, returned with increased velocity from the spongy texture towards the pelvic cavity.

"When the nervous discharge which generally accompanies seminal emission does not occur, the erection disappears much more slowly, and nervous influences can subsequently produce a second erection with greater ease and rapidity."—Valentin, translated by Brinton, p. 630.

Hunter says—"When the erection is not strong, it shall go off without the emission, but I doubt much if erection will take place without the power of emitting semen, unless under unnatural excitement, or except in cases of lesion of the spinal cord."

Bæcke thus describes the complicated act of erection in the human being:-"A sensation produced either by an impression on the eye or the touch, a dream or a simple recollection produces a first-reflex action causing dilatation of the arteries of the erectile tissues. The blood suddenly diverted (déversé) into these parts is arrested in the cavernous bodies by the self-closure (autocloue) of these veins; it distends the membrana albuqinea till it can contain no more blood: the contraction of the trabecular muscles further supports the membrane, and increases the general stiffness of the organ. At the same time blood is poured abundantly into the glans penis, but as it can escape without meeting with any obstacle, it produces but simple turgescence and a vague desire of pleasure. Soon, however, the repeated friction of the glans produces contraction of the ischio- and bulbo-cavernous muscles in consequence of a fresh reflex action. efferent veins supplying these parts are compressed at the same moment as the blood is pushed back from behind (d'arrière en avant). The erection of the glans is complete, the venereal orgasm (à son apogée) at its height, and a third reflex action acting on the vesiculæ seminales produces ejaculation. Lastly, the arteries retract or tighten (se resserrent) and the blood accumulated in the erectile tissues is impelled by the normal canals." Dict. de Médecine et de Chirurgie Pratique, tom. xiii, p. 279.

In man the act of erection lasts only a short time, but the case is different with many animals. For instance, in the dog, when the penis is introduced into the vagina of the bitch, its body becomes suddenly enlarged, and the animal is thus unable to withdraw from connection for a long time. This, according to Richerand, depends

upon the absence of vesiculæ seminales in the dog; and as the semen passes only drop by drop, impregnation would not occur had not nature ordained such prolonged copulation. This appears very probable.

In some animals, as in the monkeys, the bats, the carnivora, the rodentia, and the balænidæ among cetaceans, erection is further assisted by a bone which is imbedded in the substance of the male organ, of which it forms a considerable part. Where this bone exists the corpora cavernosa are proportionately small, and the fibrous walls of the penis are confounded with its periosteal covering.

That the erect penis should fill the vagina and distend it seems necessary to the full excitement of the female sexual feelings. It appears from the following account given by Rymer Jones, in his 'General Outline of the Animal Kingdom,' that nature has given to certain classes of animals an apparatus which deserves the attention of the surgeon; he says—

"In the guinea-pig no one will be disposed to deny that the penis is an instrument of excitement. It is strengthened by a flat bone that reaches forward as far as the extremity of the glans, beneath which is the termination of the urethra; but behind and below the orifice of this canal is the opening of the pouch, wherein are lodged two long, horny spikes. When the member is erect the pouch alluded to becomes everted, and the spikes are protruded externally to a considerable length. Both the everted pouch and the entire surface of the glans are, moreover, covered densely with sharp spines or hooklets; and as though even all this were not sufficient to produce the needful irritation, still further back there are, in some species, two short and strong horny saws appended to the sides of the organ. From this terrible armature of the male cavys it would be only natural to expect some corresponding peculiarity in the female parts; but, however inexplicable it may appear, the female vagina offers no uncommon structure." (P. 835.)

PART II

ABNORMAL ERECTION AND DISORDERS AFFECTING ERECTION

Having described normal erection and its essential conditions, it remains for us to consider a few of the more frequent perversions or morbid states affecting this function, and for the convenience of description I have treated of them under the separate sections of—

- I. SLOW ERECTION.
- II. ERECTION NOT LASTING LONG ENOUGH.
- III. IMPERFECT ERECTION.
- IV. IRREGULAR ERECTION.
 - V. Non-erection.
- VI. PRIAPISM, OR PERMANENT ERECTION.
- VII. SATYRIASIS.

SECT. I.—SLOW ERECTION

This peculiarity occurs in animals as well as men. I observed it in horses when, in 1862, I had the opportunity of visiting the well-organised horse-breeding establishment of Mr Blenkiron in company with Professor Spooner. A chestnut stallion in particular, aged and somewhat fat, was remarkable in this respect. He required to be walked about and around the mare before any erection took place, and in mounting the act lasted rather longer than is usual with other stallions.

This sluggishness, which is often rather a congenital peculiarity than a disorder, sometimes causes alarm when it exists in man. I have often been consulted by persons telling me that erection is very tardy, and requesting some stimulus for the purpose of expediting the act. Of course the invariable reply to such a request is that it would be very dangerous to interfere. The best means of allaying the anxiety of such patients is to explain to them the real cause of the symptom. If it arises from temperament, there is nothing to be alarmed at. Lethargic heavy men experience this symptom just as the too susceptible suffer from the contrary one of too rapid erection and emission. A little seasonable advice and sympathy may often in such cases prevent much unhappiness and misunderstanding. Fitting

medical treatment, moreover, can often insure some amendment, although of course nothing can alter the character and temperament of the man.

SECT. II.—ERECTION NOT LASTING LONG ENOUGH

This is one of the varieties of disordered erection which is not unfrequent, and gives rise to a great deal of annoyance. A married man considers himself potent; he wakes with erections of a morning, and finds that they occur also under excitement, but to his chagrin discovers that when he attempts sexual intercourse the erection ceases, and the act is imperfectly performed, because the organ all at once suddenly collapses.

In the opinion of the patient this is a very serious matter, but fortunately the medical man is able to give a very reassuring opinion. On investigating the causes of such failures, it will be found that this state of things depends upon causes that can be in many cases easily removed. I have known this form of disorder arise in some instances from the patient waiting too long. Erection will last but a certain time, this of course varying in different persons, and in some it can be maintained only a short time. Persons so circumstanced should not dally, otherwise failure is likely to occur. The treatment in these cases is of the simplest kind; I advise the patient not to attempt to repeat the act for twelve or twenty-four hours, or until strong desire recurs; then let him take care not to delay the act, and he will find that the erection will suffice. The occurrence, however, particularly if it happen in married men, should prove to them that age is advancing, and that the sexual power thus gives evidence of failure. To the prudent man, under these circumstances, it is a warning that he must economise his resources, and not give way to his passions, particularly if in youth he has committed excesses.

SECT. III.—IMPERFECT ERECTION

This affection is much more common than is generally supposed. It depends, according to Roubaud, upon perversion of energy, and may be caused "by the nervous system having been excited beyond its proper limits; in some eases the excitement produced has not been able to attain a sufficient energy; it consequently follows that the nervous influence soon ceases to animate the penis, in consequence of the lassitude which the efforts made to produce turgescence of the organ occasion; and the blood, no longer retained in the cavernous bodies, re-enters the general circulation."

Roubaud's view, however, is in my opinion too contracted, and if

the reader will refer to page 80, where the rationale of erection is described, he will, I think, agree with me in preferring to attribute imperfect erection either to abnormal reflex action of the sympathetic nerve, or to a want of that co-ordinate action between the veins, muscles, and arteries which is required to produce perfect erection. Instead of the occurrence of cases of imperfect erection occasioning surprise, the wonder really is that erection is so often perfect when the abuses to which the functions causing it are exposed and the variety of ways in which it is liable to be excited, thwarted, arrested, abused, interfered with, repeated, or exhausted, are taken into consideration. When we, moreover, remember that erection is more or less an involuntary act, assisted by voluntary muscles which are too often put upon the stretch, sometimes under less, sometimes under more than ordinary stimulants, when we see boys in their ignorance making all sorts of experiments in exciting, thwarting, or impeding naturally associated functions which should act synchronously, we can hardly be surprised if it taxes all the powers of the educated medical man who has studied the anatomy and physiology of the reproductive organs, to detect the precise point at which the mechanism has been put out of gear, and this most minute, intricate, and highly-organised nervous system been abnormally affected.

It is clearly not the nervous system only that may be thus deranged, any impediment to the arrest of the blood in the veins at the right moment will, if the anatomical explanation of erection be correct, interfere with its due occurrence. I may further mention non-development of the muscles, the too great irritability and over-excitement of the fibres, as influential causes of disturbance; so also any abnormal deposit from accident, wound, inflammation or thromboid condition of the blood in the trabecular tissue will detrimentally affect erection. It is difficult to lay down general rules for the repair of machinery so complicated; the treatment of each particular case must in great measure depend upon the conclusion at which the pathologist arrives as to the most probable cause of the special derangement in question, and to the formation of a sound judgment on such a point practical experience is absolutely essential. The following observations may, however, assist the surgeon who has not had large opportunities of treating this variety of disease.

When a patient consults me I generally am at some pains to ascertain if the sufferer at any time of the night or morning has a perfect erection. An answer in the affirmative shows the case to be promising, and proves that nervousness, diffidence, or some general cause must intervene. When, however, the complainant admits he never has the erection perfect, the prognosis is less favorable, and we must look for some local cause interfering with the proper performance of the act. Some light may be thrown on the best means of cure, by ascertaining

the circumstances under which the imperfect erection occurs, and whether it may not have depended upon temporary causes, such as we have described in preceding sections. It is, however, as I have said, impossible to lay down any general rules as to what should be done; the treatment in each case must be guided by special circumstances, hereafter to be noticed.

We may occasionally discover a local cause for this imperfect erection, as in the following case:—W— came to me, complaining that erection was not perfect; to effect penetration, he was obliged to grasp the penis firmly with the hand, otherwise erection would not last, the penis falling into a flaccid state; I prescribed a number of remedies and cauterized the urethra, but he subsequently told me that the operation was not attended with much benefit. In this instance W— had a slight curvature in the back, and he mentioned that in early life he had suffered from disease of the spine, with loss of motion in the lower extremities; from this he recovered by lying in the prone position. He likewise confessed that he had been a great masturbator. I did not, however, ascertain if the affection of the spine preceded or followed the indulgence of this habit.

Writers on anatomy and physiology have furnished very little information which will assist the surgeon in the treatment of these cases; however, Köbelt thinks that indolent erections (that is to say, those which we notice in drunken people, in children, in old men and persons of debilitated constitution) never extend beyond the corpora cavernosa of the penis, and they never affect the passive organ, that is to say, the glans penis and corpus spongiosum urethræ. The glans particularly, in such cases, never attains its full size, except when the other subordinate parts have been previously in a state of complete turgescence; it will be hence understood why in certain conditions (notwithstanding the complete rigidity of the body of the penis), neither orgasm nor seminal ejaculation can be produced.—Köbelt, loc. cit., p. 60.

In many of these cases, where the imperfect erection has appeared to depend upon want of support to the vessels, I have found great benefit from binding up the penis with strips of plaster, on the same principle that we treat varicose veins in the lower extremities. The occasional passing of a bougie, and even cauterization, has been likewise attended with remarkably successful results, while in other instances galvanism, and even local stimulants, with the precaution mentioned under the head of Impotence, have proved highly beneficial.

No doubt can exist that a want of a sufficiently powerful erection depends upon a feebleness of the general muscular power. That is proved by the result of treatment. In former pages I have advocated gymnastic exercise, and I have found that as the general muscular

force improves so do the muscles which minister to ejaculation and erection. Let this be borne in mind, and often such seasonable advice as tends to improve the general state of health will bring about local muscular energy, and cure the want of erectile power.

SECT. IV.—IRREGULAR ERECTION

The erection may be abnormal in nature and most painfully distort the penis while it lasts.

In March, 18—, a middle-aged gentleman called on me, and stated that he was a married man, with several children. He complained that of late the penis, in erection, had been curved upwards, presenting a scimitar shape, without any assignable cause. Connection gave him pain, and he wisely indulged very little, fearing lest he should injure himself.

In another patient the penis was of the natural size, or, if anything, rather larger than usual, but it had a very marked irregular curve. In the flaccid state, the whole organ curved forward, and at the same time to the left. The patient mentioned that in erection the penis had two curves, but he experienced no particular inconvenience from its unusual shape. The only explanation which I can offer of these strange anomalies, is that in consequence of violence, or from some other causes, inflammation of the spongy portion of the urethra has taken place, and plastic lymph been deposited, and that portions of the tissues being thus no longer distensible, but always firm and unyielding, these curvings necessarily arise on every erection. I have successfully recommended friction with iodine as a remedy. I have found equable compression, as described at page 85, with adhesive plaster very beneficial, leading, as it does, to very considerable absorption of any plastic lymph that may have been deposited.

SECT. V.—NON-ERECTION

Cases like the following not unfrequently come before a medical man, and medical students are peculiarly the subjects of the complaint.

The patient states that the erection, formerly natural, has gradually ceased to appear of a morning, although he is otherwise healthy, and does not suffer from spermatorrhea, and examination of the urine detects no spermatozoa. Such cases can be readily explained. A man studies hard, his health fails and semen is not secreted. As a natural consequence the tendency to erections diminishes. Frequently no excess has been committed—unless the inordinate exercise of the brain, often

shown by the deposition of phosphates in the urine, can be so considered. My reply to such a man is, "Be thankful that your studies are not interfered with by sensual thoughts." I advise him to continue to work hard, but not to omit regular and daily gymnastic exercise. Long observation of many such cases teaches me that after this long rest of the organs, the seminal fluid will probably again be secreted in great abundance as soon as the brain shall have ceased its inordinate demands upon the blood.

The antagonism of the nervous and generative system has not escaped the notice of writers on population. Herbert Spencer says, "Thus, the fact that intense mental application, involving great waste of the nervous tissues, and a corresponding consumption of nervous matter for their repair, is accompanied by a cessation in the production of sperm-cells, gives strong support to the hypothesis that the sperm-cells consist essentially of neurine. And this becomes yet clearer on finding that the converse fact is true, that undue production of sperm-cells involves cerebral inactivity. Throughout the vertebrate tribes the degree of fertility varies inversely to the development of the nervous system."

SECT. VI.-PRIAPISM, OR PERMANENT ERECTION

Erection, again, instead of being absent or imperfect, may be only too frequently and readily excited and too persistent. This is what is called *priapism*. Fortunately for human nature, this terrible and humiliating condition, in its full extent, is by no means common. Every now and then, nevertheless, we meet with cases where, instead of the erection only lasting a few minutes,—the male organ again resuming its usual relaxed condition,—the penis will, if the statements of patients can be believed, remain erect either permanently or during long periods.

It is to the condition of the spinal cord and brain that we must look for the source of this phenomenon. These, after all, are the primary sources of sexual excitement, and on them depend the phenomena of erection and ejaculation. Lallemand relates a case in which a patient could produce ejaculation by striking his head with his knuckles. Dupuytren has long since shown that lesions of the spinal cord produce priapism. I have witnessed several such cases, but ejaculation did not necessarily follow. It is a curious fact that this state of priapism co-exists with loss of motion and sensation in the lower extremities; and as the power in the limbs is regained the priapism ceases. It is, however, an anomaly, and Lallemand thinks it shows that priapism does not depend on irritation of the lower part of

the spinal cord; though, as he justly observes, injuries to this part of the spinal cord generally produce diminution, if not annihilation, of the virile power and of the generative functions.

The Montpelier professor mentions a curious case (vol. ii, p. 55) of a soldier who came under his care, having fallen on his sacrum; there was loss of power in the lower extremities and loss of sensation in the glans, prepuce, skin of penis, and scrotum: catheterism produced no pain, but there was catarrh of the bladder. The penis was frequently in a complete state of erection, but ejaculation never was induced, although the patient had attempted, by masturbation, to rid himself of the erection. On one occasion sexual intercourse was indulged in for several hours, but ejaculation did not occur; nocturnal emissions, notwithstanding, occasionally took place. This, Lallemand thinks, proves the special influence of the spinal and ganglionic nerves in inducing ejaculation and involuntary emissions, as the cerebro-spinal influence was completely annihilated; and this state, he thinks, is somewhat analogous to the condition of a man under the influence of wine or opium.

Such extreme cases as these are not, of course, common in practice, but still very distressing instances are not unfrequently met with.

Only a short time ago a young, highly sensitive, educated clergyman consulted me for such a condition. Walking, riding, even the friction of the trousers, would produce erection. He strove his utmost to prevent this, but in vain. On examining him I found the prepuce long, and he had been deterred from adopting the customary measures of cleanliness, for fear of directing his attention or thoughts towards subjects he found so dangerous. The treatment I enjoined in this case was not so much moral discipline or self-restraint-which there was little need to inculcate,—but simply physical cleanliness, to accustom the part to the contact of water. I told him, if ablution produced sexual feelings at first, not to mind, but to persevere, as these would cease immediately the morbid irritability had been got rid of. As soon as the external sensitiveness had been overcome, I gradually passed an instrument, and discovered the greatest morbid irritability of the urethra I ever met with. This, however, gradually declined. and the tendency to priapism disappeared.

The medical man, however, must not expect always to produce so speedy a cure as this. Indeed, as regards the treatment of this troublesome ailment, I must admit I have been much disappointed with most remedies, though I have tried nearly all those that have from time to time been recommended. Some years ago Sir Charles Locock made known, at a meeting of the Royal Medical and Chirurgical Society, what he considered a very important fact with regard to the treatment of some forms of epilepsy. He stated that in cases of

hysterical epilepsy in young women connected with sexual excitement, and recurring at the periods of menstruation, he had found the bromide of potassium, in doses of from five to ten grains, remarkably efficacious. Of fifteen cases in which he had tried it, it had failed in only one. Sir Charles attributed the good effects of the bromide to its power of diminishing sexual excitement. In consequence of this recommendation I experimented with this salt pretty largely and in very various doses. In some instances I thought I noticed beneficial effects, but in other cases no amendment followed; and I now depend upon local remedies and those applications which, acting as counterirritants, more especially influence the spinal cord, irritation of which seems particularly to promote priapism.

SECT. VII.—SATYRIASIS

Erection again may be not only morbidly frequent and persistent, but connected with a maniacal sensuality that is one of the most awful visitations to which humanity can be subject. Continual erections, immoderate desire for connection, and erotic delirium, have been given as the definition of Satyriasis.

I see, from time to time, patients who do vividly realise in their own persons the ancient fables concerning satyrs. One man, who exhibited the most distressing symptoms of this condition in unusual force, made a deep impression on me. He was young and in good circumstances, but was habitually untidy about his head and hair. His face was flushed, the cheeks and nose especially. His eyes were hollow, and had a haggard expression. The lips were thick and sensuous, the mouth wide. He was short and thickset, and of a full habit of body. I never saw a case in which the animal was so markedly prominent, although his intellect had not been altogether neglected. I learned that early in life he had masturbated himself, but had left off the practice only to commit excesses with women, of a nature and extent that were shocking to hear of. It may be worth while to notice that this man—like others afflicted in the same way showed no particular tendency to indulge in obscene talk, nor did his tastes lie in the direction of libidinous works or pictures. I believe the latter penchants are rather cultivated by nearly impotent or usedup debauchees. Refinement of vice is not sought after by the victims of satyriasis: it is quantity rather than quality that they require.

The probable explanation of such aberration is, that the brain or medulla oblongata has received some injury from excessive indulgence that has never been attempted to be controlled. A low animal organization, with a strong hereditary disposition to lust, has been overtaxed by the enormous licence the victim has permitted himself, or

some undetectable lesion has taken place which puts the man at once beyond his own control, almost out of the category of rational or moral agents, and leaves him in a condition in which there seems, indeed, little hope of any restoration.

Admitting that the condition of satyriasis depends for its commencement upon uncontrolled lust, sometimes aided by local irritation existing in or about the generative organs, yet its ultimate and frightful extravagances seem always to depend on positive lesion of the nervous system. In many cases, recognisable irritation of the cerebellum exists to a degree quite sufficient to account for the most painful and deplorable symptoms.

Mr Dunn, in 1849, brought before the Medical and Chirurgical Society an interesting case of death from apoplexy, attended with a softened, pulpy state of the right hemisphere of the cerebellum, in the midst of which was an apoplectic clot of the size of a pullet's egg. The patient's wife had observed that he had been subject to a constant desire for sexual intercourse. In the discussion which followed, Dr Carpenter referred to a case mentioned to him some years previously by Mr Turley, of Worcester, in which a man advanced in life became the subject of satyriasis to such a degree that he would even practise masturbation in the presence of females, and after death a tumour of the size of a split pea was found on the pons variolii. (See 'Lancet,' vol. i, 1849, p. 320.)

A physician in the west of London was recently called in to attend a powerful man, of between fifty and sixty, who exhibited every indication of approaching homicidal mania. He found, on inquiry, that the present fit had been preceded by an extravagant indulgence in connection with his wife. The proper remedies were used, the patient became somewhat calmed, and the wife was solemnly warned on no account to permit any renewal of intercourse. She was a weak woman, and from time to time yielded, each indulgence being followed by a fresh outbreak on the part of the patient. At last, after a series of excesses, the homicidal fury broke out in full force, when, with considerable danger, the patient was secured and conveyed to a lunatic asylum.

91

CHAP. II.—EMISSION

EMISSION

Emission is the second of the requisites specified at page 75 to ensure successful intercourse.

PART I

NORMAL EMISSION—CONDITIONS ESSENTIAL TO IT

It is thus described by Kirkes:—"The emission of semen is a reflex act, and as such is governed by the spinal cord. The irritation of the glans penis conducted to the spinal cord, and thence reflected, excites the successive and co-ordinate contracting of the muscular fibres of the vasa deferentia and vesiculæ seminales, of the accelerator urinæ and other muscles of the urethra; and a forcible expulsion of semen takes place over which the mind has little or no control, and which in cases of paraplegia may be unfelt."—7th Edition, p. 506.

Valentin adds:—"This effect may be artificially produced in recently killed animals. The semen reaches the inferior and glandular part of the vas deferens. It then traverses the urethra to the orifice of the glans, when it is ejaculated with a force which in vigorous men can expel it to a distance of many feet."—Valentin translated by Brinton, p. 625.

The semen, however, as emitted, is not the semen as it is secreted in the testes. It may be said, while in the testes, to be in little more than a rudimentary state. When ejaculated, it is a highly elaborated secretion. None, in fact, amongst the various secretions of the body seem to require so much time to mature. Not only have cells to be formed and thrown off, as in the case of other secretions, but, after they are liberated in the tubercles of the testis, nuclei have to divide, nucleoli to multiply, and each division of the nucleoli to become, through a gradual adolescence, an adult spermatozoon. When thus prepared, it is passed down the spermatic cords to the vesiculæ seminales. The vesiculæ, Pittard says, "are never found empty, except when they are diminished after the periodic rut in certain animals. They do, indeed, seem equally full at all times, but there is little doubt

that this appearance is deceitful. They have the power of contracting and expanding, according to the volume of their contents, so that they are never flaccid, and always appear to be full. I have observed them exceedingly full and large in animals just killed, and have watched them contracting under the stimulus of exposure to cold air, and when nearly the whole of their contents have been expelled by the contraction they have still appeared to be quite full. I should have considered them to be so if I had not actually seen them expel their contents." It is certain, nevertheless, that the whole contents of the vesiculæ are not emitted in one copulation. The possibility of the act of copulation, however, does not depend on the existence of matured semen in the vesiculæ.

Some authors, indeed, assert that emissions depend wholly on the presence of well-formed semen in the vesiculæ seminales. This, however, is incorrect, for Sir A. Cooper states that a patient of his, from whom he had removed both testes, was able, some time after ablation of the organs, to have connection, accompanied with the feeling of ejaculation; and even, at a later period, erection of the penis took place, but without the sensation of emission. In the East the value of a cunuch is much enhanced by ablation of the penis, as removal of the testes alone does not suffice to prevent erection.

The matured semen lies in the vesiculæ until the ejaculatory act is excited. This action is performed principally by the involuntary muscles of those organs. Kölliker says: "In ejaculation the vasa deferentia, provided, as they are, with a colossal muscular apparatus, are chiefly operative; these organs, as Virchow and I found in an executed criminal, shorten and contract with remarkable energy when excited by galvanism, as also do the vesiculæ seminales, the highly muscular prostate, and of course, the transversely muscular tissue of the urethra and penis." (P. 243.)

The fascia that invests the vesiculæ seminales in man contains a great proportion of involuntary muscular fibre, and there is also a large admixture of involuntary fibre in the proper parietes of the tube. In the elephant the vesiculæ seminales present, on the outer and anterior aspect, a peculiar muscle rising from the neck and middle part of the sac, and spreading out over the upper part, which can contract the cavity and expel the contents.

In animals that have a rutting season the vesiculæ seminales, as well as the testicles and scrotum, are exceedingly small during the period of rest, and enlarge enormously and rapidly previously to the season of rut.

The semen, before it is ejaculated, is not only matured, as has been described, but is mixed with the secretion of the vesiculæ seminales

and with that of the prostate. The object of this dilution seems to be to render it more fluid, and thus more capable of passing easily along its course. As soon as the thick mucus of the vesiculæ seminales meets and amalgamates with the semen, the mixture becomes much more fluid than either of its component parts. Indeed, if the mucus is exposed to the air before the semen is added, it becomes almost solid.

It is owing to the abundance of these other secretions that ejaculation takes place after the removal of the testicles. A striking instance of this came under my notice a few years ago. On the 4th of January, 1859, Mr. Holthouse removed both testes from a man in consequence of his suffering from epilepsy. The case created a good deal of discussion at the time; and as the patient entered another hospital for a different complaint, a medical friend, thinking I should like to know the result, sent him to me, and on the 26th of March, 1859,—that is, nearly three months after the castration,—I ascertained the following particulars:

Within the week following the removal of the testes this man had two emissions. Subsequently three more emissions occurred, the last on the 2nd of March; that is, two months after the operation. At the time I saw him he appeared in no way distressed in mind, and I could note no symptoms betokening him a monomaniac. He complained of a frequent desire to make water. I tested the urine, but found it natural.

Sir Astley Cooper, in his observations on 'Diseases of the Testes,' p. 54, mentions having removed both testes from a man. Four days afterwards the patient had an emission, which appeared upon his linen.

"For nearly the first twelve months he stated that he had emissions in coitu, or that he had the sensations of emission. That then he had erections and coitus at distant intervals, but without the sensation of emission. After two years he had erections very rarely and very imperfectly, and they generally ceased immediately upon the attempt at coitus. Ten years after the operation, he said he had during the past year been only once connected.

"Twenty-eight years after the operation, he stated that for years he had seldom any erection, and then that it was imperfect; that he had no emissions from the first year of the operation; that he had for many years only a few times attempted coitus, but unsuccessfully; that he had once or twice dreams of desire, and a sensation of emission, but without the slightest appearance of it. The penis was shrivelled and wasted. He was in the habit of shaving once a week, and sometimes twice. His voice, naturally rather feeble, remained as at the time of the operation."

Of the persistence of sexual desires, and to a certain extent sexual power, we read in Juvenal:

"Sunt quas eunuchi imbelles ac mollia semper Oscula delectent ac desperatio barbæ Et quod abortivo non est opus."

Köbelt imagines that excision of the glans penis would destroy all desire, as it is the rendezvous of the sensitive nerves which excite venereal desires.

That this statement is not borne out by facts, is clearly proved by the case in my own practice, related subsequently, where the glans penis had been destroyed, and yet the patient fully performed all his marital duties. We have also the experience of practical shepherds, who find that the removal of the "worm," as they call the point of the penis in the ram, does not prevent the ram from attempting connection. Division of the pubic nerves, however, seems infallibly to annihilate all sexual feeling, and to destroy at once the power and the desire of connection. Günther observes:

"After division of the nerves of the penis (nervi dorsalis penis) the most powerful and erotic stallion appears almost at once to be more completely deprived of every sexual feeling than he could possibly be after castration."—Günther, 'Untersuchungen und Erfahrungen im Gebiete der Anatomie, Physiologie, und Thierarzenei-Kunde,' Hanover, 1837, § 153.

EFFECT OF EMISSION IN THE MALE.—Emission in healthy males is attended with spasmodic excitement, followed by temporary nervous prostration. Lallemand calls this excitement *ébranlement nerveux epileptiforme*. This is seen in a very exaggerated form in the buck rabbit, who, after every copulation, may be noticed to fall on his side in a sort of epileptic fit; the whites of his eyes are turned up; he gives several spasmodic twitches with his hind legs, and lies panting for some moments, until the nervous system recovers itself.

There are some men in whom this sort of epileptiform orgasm takes place every time connection is indulged in. Napoleon I is said to have been subject to epilepsy when, resting from his great labours, he indulged in sexual intercourse. No doubt can exist that deaths which have occurred in houses of ill-fame, as well as on the marriage couch, have arisen from this cause acting upon highly susceptible organisations. Entomological works abound with cases in which the male dies after the act of copulation. The following, which reads almost like romance, may be explained, perhaps, by this epileptiform attack killing the frail insect. It is a brief history of the establishment and growth of a colony of termite ants, as related by Burmeister.



"At the termination of the hot season, the young males and females quit the nest, and appear upon the surface of the earth, where they swarm in innumerable hosts, and pair. The busied workers then convey a chosen male and female back into the dwelling, and imprison them in the central royal cell, the entrances to which they decrease, and guard. Through these apertures the imprisoned pair receive the nutriment they require. The male now, as amongst all other insects, speedily dies after the impregnation of the female has been effected: but the female from this period begins to swell enormously, from the development of her countless eggs, and by the time she is ready to commence laying, her abdomen is about 1500 or 2000 times larger than all the rest of her body."

Of course any such epileptic attack in man is only the rare exception. In a young healthy, fully-developed adult, the shock which the nervous system receives is recovered from immediately. Ejaculation is in him a healthy function, from which he rallies directly; and the act may be, and is, repeated with impunity by some men, at very short intervals.

In other instances, however, particularly in those who suffer from any of the severer functional affections spoken of in this volume, the act is followed by intense depression, and a day or two may pass before the system rallies. In such instances, I believe, it will generally be found that the frame has previously been enfeebled by great excesses, and then each act of insemination produces serious depressing effects, far different from the natural ones.

I have been consulted by some few persons, on the other hand, who never appear to suffer from the act, although excesses may be committed to a great extent. This tolerance of the orgasm—which is remarkable in individual cases, and which permits the frequent recurrence of the shock without any ill effect either at the time or later—must depend upon some constitutional difference of nervous system of which we are ignorant.

We may, however, for the present, neglect both of these extremes—the persons who die or seriously suffer from one act of coition, and those who can commit almost satyrine excesses with apparent, though temporary, impunity. The question we have to consider is, what effect the act has upon ordinary men. It is, I conceive, most important to have correct notions upon this subject, to be neither alarmed by vague fears nor led astray by rash ignorance.

It is, of course, the nervous system which is primarily affected. The ancients had some curious, and I need not say erroneous, notions on these matters. They believed that emission was the actual passage of brain down the spinal cord; and we find them speaking of connection being followed by the stillicidium cerebri.

Hippocrates says: "The humours enter into a sort of fermentation, which separates what is most precious and most balsamic, and this part thus separated from the rest is carried by the spinal marrow to the generative organs."—De Genitura, Foesius, p. 231.

This popular notion is not yet extinct. It is not long since I heard one man about town coolly asserting to another his entire belief that Lord —, a noted old libertine, was killing himself by inches; that he had long since ceased to emit semen; and under unnatural excitement the substance of the brain was now passing away in the venereal orgasm, as was proved by the great nervous depression which was known to follow each sexual effort. The narrator, moreover, asserted most confidently that his lordship was aware of the fact; but that, in spite of all remonstrance, no sooner did the old debauchee recover from the effects of one loss than he incurred another.

Tabes dorsalis (apparently the ancient term for the disease called by the moderns spermatorrhæa) is described by old writers as wasting of the spinal cord. So late as the time of Richerand, we find him, in his 'Physiology,' seriously asking his readers "if the nervous depression which follows connection depends upon the fatigue of the organs, or, as some metaphysicians have believed, is it caused by the confused and indistinct notion that the soul takes of its own destruction?"

M. Parise also, in his valuable book on the diseases of old age, uses figurative, but no less erroneous expressions to the same effect, which he has gleamed from the old writers.

"Semen is life itself under a fluid form—the vital principle condensed and perceptible. Camus said it was composed of microscopical brains directly emanating from the great brain. The ancients considered this liquid as a discharge from the spinal marrow and brain, and called it cerebri stillicidium."

"Its importance is demonstrated by the fact that the smallest quantity contains life in activity, and can communicate it; that its presence and its secretion impress the organisation with an extra quantity of force and energy, whereas repeated loss of it enervates and rapidly wears out the body. Nothing costs the economy so much as the production of semen, and its forced ejaculation. It has been calculated that an ounce of semen was equivalent to forty ounces of blood. According to Bichat, the secretion of sperm is in an inverse proportion to the secretion of fat; and we at once see the reason, semen is the essence of the whole individual. Hence Fernel has said 'totus homo semen est.' It is the balm of life—one of its best and most powerful stimulants. That which gives life is intended for its preservation. (Reveillé-Parise, 'De la Vieilesse,' p. 415.)

Of course these alarming statements are not such as modern science can at all indorse. Nevertheless it should be remembered that the semen, as I shall have occasion presently to show, is a highly organised fluid, requiring the expenditure of much vital force in its elaboration and in its expulsion. Even in the strongest adult, and much more in the youth or the weakly man, the whole of the functions connected with it are most vital and important—the last that should be abused.

PART II

DISORDERS AFFECTING EMISSION

We have now to consider the disorders that may complicate or interfere with the ejaculatory part of the sexual act. It has been generally supposed that the loss of semen was the sole cause of sexual debility in the male. That such is not the case is proved by the nervous depression coming on in young children from sexual excitement before they can be said to secrete semen. Similar exhausting nervous effects are noticed in women, who do not secrete any such fluid, but merely mucus, and yet may experience the nervous orgasm or spasm which acts as harmfully on them, when much indulged in, as on males. The immediate cause of this nervous depression has, within the last few years, excited a good deal of attention; and I, in common with many modern writers, have come to the conclusion that

1 No woman, any more than any other female animal, secretes or loses semen, or anything analogous to it, during the sexual orgasm. The spent secretion contains no spermatozoa. What passes, if examined under the microscope, consists of mucus or the débris of epithelium. Nevertheless, as an effect of long-continued, and often repeated sexual shocks, women may exceptionally—feeble as their sexual tendencies are compared with men's—become subject to epileptiform attacks, and various nervous affections, as well as local affections of the uterus, direct consequences of sexual excesses. The womb—as has been well observed—is the centre round which women's sentient feelings radiate. No one who has treated a large number of women labouring under uterine affections, but must have been struck with the haggard feverish pinched cast of countenance which too often characteristically denotes the existence of long-standing uterine affections. In every way it resembles the look of the young libertine who has given way to a long-continued course of sexual excesses; and the long lank hair of the enfeebled delicate girl-like boy tends often to make the delusion more perfect. I had the painful duty lately of inspecting some photographs of boys who had for some time ministered to the depravity of the vilest men, and the lens had but too truly depicted, and perhaps exaggerated, the hang-dog look which these youthful miscreants exhibited; but I must admit that in that collection there were other portraits of youths who presented all the external symptoms of perfect blooming health, and whose features could not be distinguished from ordinary well-conditioned young men.

there is a good deal of evidence now existing which shows that shocks constantly received and frequently repeated on the great ganglionic centres may produce irritation in them, and thus cause many of the obscure forms of disease to which we have hitherto failed in discovering a key. If there is any cause which is likely more than another to produce undue excitement of the ganglionic system, it is the too frequent repetition of acts involving this nervous orgasm.

It has been clearly proved by Brachet that if the solar plexus and semilunar ganglion in an animal be irritated, it will, as soon as the parts become imflamed, express feelings of suffering. When the communication is cut off between these ganglia and the spinal cord, all symptoms of pain or irritation of the ganglia cease.

Hence we should infer, I think, that undue excitement of the generative functions may set up irritation of these ganglia, and that this undue excitement will be communicated to the spinal cord, producing depression of spirits, pain at the pit of the stomach, and general prostration. I may, moreover, remark, that if this is the modus operandi of such lesions, it is not surprising that in many cases where we notice the effects of excesses in young men, nature should be with difficulty able to recover from such rapidly repeated shocks. We have reason, also, to believe that the irritation set up has in such cases so morbidly excited the channels of nervous influence, that they have received some permanent damage which they very slowly recover from. Müller considers the ganglia as the source of the energies of the sympathetic nerves, and the fountain from which the ganglionic system draws the constant, gradual, galvanoid action which is kept up in the capillaries throughout the frame.

Many of my readers will probably agree with me in considering that this view of the subject is the one most in accordance with our knowledge of physiological phenomena of the nervous system; of course it does not admit of positive proof, but it has the most recent indications of experiment on its side, and is in strict accordance with our observations on the living. If these views are correct, we should the more insist upon the necessity, in susceptible individuals, of avoiding too great excitement of the nervous system by repeated sexual shocks, and upon the baneful effects of any such excitement on the youthful frame before it has arrived at maturity.

Sir James Paget has kindly favoured me with his opinion as to the probable morbid state of the nervous system induced by excesses.

"I believe that the morbid state of the nervous system—more particularly of the spinal cord—which is produced by excessive sexual intercourse, is analogous to that which is sometimes observed in muscles after excessive exercise. The history of some of the cases of 'progressive muscular atrophy' makes it evident that, in some

persons, the excessive employment of single muscles, or groups of muscles, may lead to their complete atrophy; and that this atrophy may be manifested sometimes by simple wasting of the muscular tissue, sometimes by fatty degeneration, sometimes by these forms of atrophy combined in various proportions. And it seems not improbable that these states are to be ascribed to the impairments of texture, which are naturally produced in the exercise of muscles, being in these instances unrepaired. It is certain that in the natural exercise of a muscle its composition and texture are, in however small a measure, changed; many of the results of the change have been traced by chemical analysis; fatigue is the sensation we have of the changed state of the muscles or its nerves; and the state is one of impairment, for the muscle has lost power. In health, and the natural course of events, the repair of the thus impaired muscle is accomplished during the repose which follows exercise. But, if due repose be not allowed, the impairments may accumulate, and the muscles may become gradually weaker, so as to need greater stimulus for the fulfilment of their ordinary work; and at length, in some instances, they may even lose the power of repairing themselves during repose. these instances they are the subjects of the progressive muscular atrophy.'

"Now, although the very nature and products of the changes that ensue in nervous organs during their exercise are less well known than are those that ensue in muscles, yet the occurrence of such changes is certain; some of them are traced by analysis; they are similarly felt by fatigue; similarly repaired in repose. And it seems a fair analogy which suggests that the loss of nervous power, and especially the paraplegia, that may follow long-continued sexual excess, are due to changes parallel with those that are witnessed in the progressive muscular atrophy after excessive muscular exercises—the softening and wasting of the paraplegic cord being a process of fatty and wasting degeneration essentially similar to that traced in muscles.

"In the progressive muscular atrophy, the wasting or other degeneration of the muscles generally proceeds, in course of time, to muscles more and more distant from those first affected after over-work; by similar progress, the degeneration of the spinal cord may extend far from the part first affected in consequence of its over-exercise in the sexual acts.

"It is taken for granted here that the act of copulation and emission is associated with what may be regarded as violent exercise of the spinal cord; and this cannot reasonably be doubted. But I have also no doubt that cases of paraplegia may be sometimes seen in which the excessive exercise of the cord has been in its participation in violent and long-

continued voluntary muscular actions, especially in excessive walking, running, and other such acts.

"In what is said above, I have had in view only the cases of gradual loss of nervous power due to excessive sexual acts. Where the loss is rapid, it may be due to inflammation (associated as that process is with rapid degeneration) of the nervous organs. But here also the parallel with muscles will hold; for an excessively exercised muscle not unfrequently becomes inflamed, and its inflammation may very quickly lead to its wasting or other degeneration, and its corresponding loss of power.

"I cannot guess why excessive sexual acts should be followed, in some persons, by loss of nervous power, while in other persons they seem harmless; but the same differences are seen, and are equally inexplicable, in the case of the muscles. In some persons the same exercise which in others leads to muscular atrophy is followed by the attainment of greater power, and by the growth of the exercised muscles.

"I do not know what lesions ensue in the nerves-fibres when the cord degenerates in the instances referred to above; but the analogy of the muscular atrophy, in which the nerves degenerate with their muscles (though probably only secondarily), makes it probable that the spinal nerves partake of the degeneracy with the cord."

SECT. I.—PREMATURE EJACULATION

Of all the disorders of the sexual organs this is the one that a surgeon most frequently is consulted about.

Patients complain that semen is emitted so readily, that if they even converse with women, or if they ride on horseback, or walk fast, semen will come away. The friction of the trousers, in some instances, appears sufficient to produce an escape of seminal fluid; others affirm that ejaculation is attended with scarcely any spasm.¹

In other instances, erection is hardly complete before emission follows, and then, as the erection immediately ceases, the intended intercourse fails. It is fortunate, considering the disappointment and distress which such a state of things causes, that this disordered function is very amenable to treatment.

Such patients should be made aware that hardly any man ever attempted connection for the first time without emission taking place

¹ This rapidity of emission has been likewise noticed, under similar circumstances, in animals. Breeders know so well that the first leap which an entire horse takes after being put by for some time will be attended with too rapid ejaculation, that at the end of a few days the mare is again put to the horse.

prematurely, sometimes from nervousness, but more frequently, perhaps, from natural impetuosity. This is, as I have said, often the case with animals. In most instances the repetition of the act will soon correct this over-rapidity of ejaculation. Whatever the cause, the symptom, if it occurs, should not be neglected or treated lightly; above all, the patient should not be thoughtlessly recommended to repeat his attempts. I have seen some very lamentable cases of complete impotence resulting from such a course. In addition, however, to the more ordinary causes arising from ignorance, alarm, a bad conscience, or want of power over the will, I would particularly mention another which is not generally appreciated, namely, an excessive irritability of the organs.

A gentleman was sent to me from a midland county suffering from debility of the most marked kind. He was subject to frequent emissions, and the least mental or physical impression produced ejaculation. I desired my patient to uncover the glans; this he was unable to do; he feared either to touch the organ himself, or allow me to examine it, so great was its sensibility. After several efforts I succeeded in uncovering the glans, and found it coated with hardened, wrinkled, and dry smegma, which was very tenacious. With great care this was washed off, and my patient fainted before I succeeded in removing the secretion. In subsequently passing an instrument, I could not discover any unusual morbid irritability of the urethra in this case. Nothing but the sensibility of the glans and prepuce had caused the morbid symptoms, and as soon as these were relieved, the previous tendency to premature ejaculation ceased.

A tight foreskin is very often the cause of many a functional disorder, as the following instance will show:

A middle-aged clergyman called on me, stating that he was partially engaged, but feared he was unable, or rather unequal, to marry, and wished my opinion on the subject. External examination detected a very long foreskin, which I induced him, after some difficulty, to allow me to withdraw, as the parts, he stated, were too sensitive even to be touched. I effected my purpose after many attempts, but I was unable to return it without giving my patient more pain than I was disposed to do, in consequence of the glans penis being of that mushroom shape that I shall subsequently speak of. I therefore at once divided the little fibres which caused the paraphymosis, and at once the foreskin could be easily reduced. The gratitude this gentleman the next day expressed was beyond measure for the benefit conferred; he at once felt that the cause of a miserable existence had been removed; he had been wretched for years, he knew not why, till now. Fond of the society of women, he had shunned

them, and he might have been married years before had not his sexual sufferings been so great.

The treatment must depend upon the causes; but the first and most important step is to refrain from attempting connection when frequent efforts have already been made without success, until the patient has consulted a medical man. In the slighter forms of the affection, indeed, and in incipient cases, the patient may be told to repeat connection as speedily as possible after failure, and as soon as erection returns. In the more severe cases, however, this will not be prudent. Indeed, erection will probably not again recur; the disappointment and depression are so great that a second attempt will not and cannot be made.

In such instances some irritability of the glans or urethra probably exists, and the surgeon's aid must be called in. It is surprising how easily these cases are cured if the irritability is first of all removed, as in the instance I have mentioned above. Merely accustoming the glans to the application of air, water, or lint, will often suffice. Sometimes the passage of a bougie along the urethra will be necessary, or cauterization may be required.

SECT. II.—NON-EMISSION

The next affection which calls for notice is non-emission. An otherwise healthy patient will tell you that he is able to have connection, the erection is perfect, but no emission follows, and no pleasurable sensations are felt. I am indisposed to believe that a patient's sensations can always be depended upon when the organs have been much abused, for emission may sometimes take place without his knowledge. There are, however, numberless instances in which emission fails to attend connection.

Among the causes of this disorder the most frequent, perhaps, is stricture, often of old standing. In such a case the mechanical obstruction prevents the passage of the semen, and it is only when erection has passed away that the fluid oozes out. In very severe cases of stricture I believe the semen, if emitted from the testes, passes back into the bladder instead of forward along the urethra, and may be noticed in the urine in the form of a thick, viscous substance. But I would here warn the reader against mistaking for semen all deposits,¹

¹ Patients often require to be warned against considering as semen the various deposits to be seen, the next morning, at the bottom of the vessel into which they may have made water. If semen is present, it may be noticed falling to the lower stratum of the urine immediately after micturition. As a general rule it may be laid down

observed in the urine. These are of the most miscellaneous and varying composition, such as mucus from the bladder, the lithates, or the phosphates, produced by a variety of causes which this is not the place to inquire into, and which only a medical man can diagnose. True semen is very rarely found in any perceptible quantity deposited in the urine.

I need hardly point out that non-emission under sexual excitement requires surgical treatment. When the stricture is cured, and the canal of the urethra properly dilated, the emission will, if no other ailment exist, occur at the proper time.

The most serious and puzzling instances of non-emission are those where there is no appreciable mechanical cause to account for it.

I met with a most singular case of this kind some time ago. The patient was an American. Erection was perfect, but emission did not follow. When erection ceased there was occasionally a slight oozing from the urethra. Strange to say, this patient had emissions at night once or twice a week. The testicles were small. A short time before, he had been operated on for varicocele without any good effect. He had also been cauterized. Slight stricture existed, as was ascertained by the bulbed instrument, but a conical bougie easily passed. In this instance there was apparently nothing but a want of co-ordinate action between emission and erection, both being perfect at different times. The patient under proper treatment ultimately recovered.

Another class of cases is met with, which is less amenable to treatment, viz., where non-emission depends upon complete obstruction of the vasa deferentia (k). (See Diagram on succeeding page.)

Dissection of the appendices or canals for conducting the semen from the testes (f) to the vesiculæ seminales (l) shows that after inflammation or injury the passage through them may be completely blocked up; the secretion of the testes then going on as usual, remains pent up in those glands without any direct means of exit.

In such cases as these, sexual intercourse will either be unattended with any kind of emission, or, if fluid is ejaculated, it cannot contain spermatozoa and be fertile, but must consist only of prostatic fluid, or the secretions from the vesiculæ seminales (I). These are cases that have not yet attracted much attention from the profession, but of their

that all deposits falling down when the urine is cold are not composed of semen. The knowledge of this fact will give great satisfaction to patients and prevent much misapprehension.

I may even further state that all deposits following immediately after making water are not necessarily semen. Thus, within the last few days I saw a patient, on a cold day, make water into an empty tube in my consulting-room; the tube was placed in cold urine, and immediately the urine of the patient coagulated, as it were, and a white flocculent deposit was found in the bottom of the tube, dependent upon the urine being phosphatic.

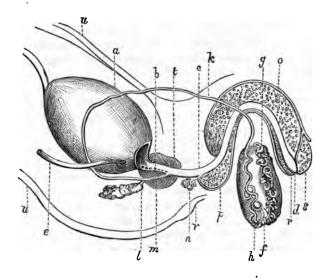


DIAGRAM SHOWING A SIDE VIEW OF THE MALE REPRODUCTIVE ORGANS

Explanation of Figures

- a Bladder.
- b Prostatic portion of the urethra laid open, showing the position of the veru-montanum or caput gallinagenis, and how the different canals conveying fluid from the Vesicules Seminales (l) and Prostate (t) meet and mix their secretions with that of the semen (proper) coming from the testicles (f).
- c Membranous portion of the urethra.
- d Spongy portion of the urethra.
- e Right ureter as it enters the bladder.
- f Testicle (right).

- g Epididymis globus major.
- h Epididymis globus minor.
- k Vas deferens (right).
- l Vesicula seminalis (right).
- m Ejaculatory duct.
- n Cowper's gland.
- o Corpus cavernosum of the penis.
- p Bulb of the urethra.
- r Corpus spongiosum of the urethra.
- s Corpus spongiosum of the glans penis.
- t Prostate (bisected).
- v Anus.
- uu Anterior wall of abdomen, and outline of sacrum.

The reader will see in the above Diagram the relative positions of the reproductive organs most admirably portrayed. I have much pleasure in acknowledging the advantage I have derived from the kind assistance of Mr. Callender, who has corrected the anatomical relations.

existence there can be no doubt. Obstruction, in its early stages, may be suspected when we find the testicles enlarged, painful, and tense, and yet no emissions following sexual intercourse; and also in cases where gonorrhea has been succeeded by inflammation of the testes.

When we bear in mind the frequency of swelled testicle and inflammation of the chord, instead of being surprised at the occasional occurrence of these obstructions, we may rather wonder that they do not follow more frequently. Happily, however, impotence depending upon non-emission from such causes is rare. Where one testicle or one epididymis or one chord only is affected, the other will carry on all the proper functions. When both chords are blocked up the testes will probably diminish in size until we have hopeless sterility with or without atrophy of these organs, as well as obstruction of the vasa deferentia (k). Such cases, I fear, must be considered beyond the reach of our art. (See chapter on Sterility.)

SECT. III.—NOCTURNAL EMISSIONS OR POLLUTIONS. WET DREAMS

Instead of taking place only during sexual congress, emission may occur at night. The surgeon is usually consulted for cases presenting as nearly as possible the following symptoms:—Patients will tell him that, though leading a continent life, they suffer from emissions at night, and that these generally occur during a dream, and that on waking they find the penis is at the time in a state of erection.

Great alarm is often expressed by patients who suffer in this way; but I am enabled to give them much relief when I mention that such emissions, occurring once in every ten or fourteen days, are in the nature of a safety valve, and are even conducive to health in persons who do not take enough exercise, and live generously. It would, however, be better for the adult to be free even from these; and I feel convinced that in one who has not allowed himself to dwell on sexual thoughts, but takes strong bodily exercise, and lives abstemiously, emissions will either not occur, or their occurrence may be looked for only very rarely. It is when the losses or escapes take place repeatedly, attended by symptoms of prostration, with other ill consequences, that the patient should seek medical advice.

It will be well to bear in mind, while we are considering these phenomena, the nature of emission with relation to the will, and also what is known on the very obscure subject of dreams.

"The emission of semen," says Kirkes, "is a reflex act governed by the spinal cord; the irritation of the glans penis (s), conducted to the spinal cord, and thence reflected, excites the successive and co-ordinate contractions of the muscular fibres of the vasa deferentia (k), and vesiculæ seminales (l), and of the accelerator urinæ, and other muscles of the urethra; and a forcible expulsion of semen takes place, over which the mind has little or no control, and which in cases of paraplegia may be unfelt."

The same author further remarks,—"In this fact that the reflex movements from the cord may be perfectly performed without the intervention of consciousness or will, yet are amenable to the control of the will, we may see their admirable adaptation to the well-being of the body. Thus, for example, the respiratory movements may be performed while the mind is in other things fully occupied, or in sleep powerless; yet, in an emergency, the mind can direct and strengthen them; and it can adapt them to the several acts of speech, effort, &c. Being for ordinary purposes independent of the will and consciousness, they—reflex movements—are performed perfectly without experience or education of the mind; yet they may be employed for other and extraordinary uses when the mind wills, and so far as it acquires power over them. Being commonly independent of the brain, their constant continuance does not produce weariness; for it is only in the brain that it or any other sensation can be perceived."2

"The emission of semen is a reflex act, that is, there is the necessary precedence of a stimulus, the independence of the will, and, sometimes, of consciousness, the combination of many muscles, the perfection of the act, without the help of education or experience, and its failure or imperfection in disease of the lower part of the cord." 3

On the subject of dreams, Carpenter says, "We have hitherto spoken of sleep in its most complete or profound form; that is, the state of complete unconsciousness. But with the absence of consciousness of external things there may be a state of mental activity of which we are more or less distinctly cognizant at the time, and of which our subsequent remembrance in the waking state varies greatly in completeness. The chief peculiarity of this state of dreaming appears to be that there is an entire suspension of volitional control over the current of thought, which flows on automatically, sometimes in a uniform coherent order, but more commonly in a strangely incongruous sequence. The former is most likely to occur when the mind simply takes up the train of thought on which it had been engaged during the waking hours not long previously, and it may even happen that in consequence of the freedom from distraction resulting from the suspension of external influences the reasoning

¹ Kirke's, 7th edition, p. 507. ² Ibid., p. 505. ³ Ibid., p. 506.

processes may thus be carried on during sleep with unusual vigour and success, and the imagination may develop new and harmonious forms of beauty. The more general fact is, however, that there is an entire want of any ostensible coherence between the ideas which successively present themselves to the consciousness; and yet we are completely unaware of the incongruousness of the combinations which are thus formed. It has been argued by some, that all our dreams really take place in the momentary passage between the states of sleeping and waking; but such an idea is not consistent with the fact that the course of a dream may often be traced, by observing the successive changes of expression in the countenance of the dreamer. It seems, however, that those dreams are most distinctly remembered in the waking state, which have passed through the mind during the transitional phase just alluded to; whilst those which occur in a state more allied to somnambulism are more completely isolated from the There is a phase of the dreaming state ordinary consciousness. which is worthy of notice as marking another gradation between this and the vigilant state; that, namely, in which the dreamer has a consciousness that he is dreaming, being aware of the unreality of the images which present themselves before his mind. He may even make a voluntary and successful effort to prolong them if agreeable, or to dissipate them if unpleasing; thus evincing the possession of a certain degree of that directing power the entire want of which is the characteristic of the true state of dreams."—Human Physiology, p.

The idea may originate in impressions derived from any part of the bodily frame; thus we find that indigestion is a very common cause of nightmare, and that an irritable state of the genital apparatus produces lascivious dreams.—Carpenter, in Todd's Cyclop., p. 689.

I would wish to relate some additional recent experience on the effect irritating substances have in producing most unpleasant dreams.

Just before going to bed I ate some oysters. In the course of the night I dreamed that I was choking and unable to breathe. Then came the ineffectual efforts to clear my throat, and I felt that death was imminent. I recollected afterwards, however, that this might only be a dream, and I remembered attempting to wake myself; this I succeeded in doing, and then found to my delight that I could dislodge from the throat some very tenacious mucus—which occasionally collects there, as I am subject to bronchitis in winter—and at other times a collection of birdlime-like mucus. The undigested food taken the night before had, no doubt, augmented the tenacity of the mucus and caused the dream. Now, as any irritating substance in the throat may cause one person to dream of suffocation, with all its attendant horrors, so any irritation of the rectum or acidity of the

urine acting on the bladder—which organs sympathise freely with the vesiculæ seminales—may by reflex action act on the muscles which produce emission, and a wet dream will follow under the influences of these causes. Here, as in the former case, the will may or may not come into operation, and the emission may or may not be avoided.

From these data, then, I venture to argue that we may experience in a dream all the sensations of emission, and that it is only on awaking that we can ascertain whether such an event has really happened or not.

The modified power of control by the will does, I believe, almost invariably exist in lascivious dreams, not that, after the orgasm itself has commenced, the will has much power to check the continuation of the muscular spasms and the ejaculatory efforts of the vesiculæ, though even over these it has, when honestly exerted, no little control, being able to shorten as well as prolong the ejaculatory act.

But to put an entire stop to it, when once commenced, is apparently impossible. That the mere convulsive act itself is neither dependent on nor subject to the control of the will, appears from the singular fact that criminals who have been hanged frequently have an emission, probably arising from the violent shock to the medulla oblongata.

It is an error, then, as I have said, to suppose that the will has no control in these cases. It entirely depends upon when the will is exerted. In waking moments, every man who has not debased and enervated his will is more or less able to keep his thoughts entirely pure. It is of his own free will that he sins. Hardly less, as I shall go on to show, is his power of keeping his dreaming thoughts pure, if he goes the right way to work. Not at all less is it his duty and his true profit to endeavour to do so.

I have every reason to believe that a man recovering from spermatorrhea, or who has been under treatment, and complains that he suffers from nocturnal emissions, often believes that he still suffers from nocturnal emissions because he dreams he has had them.

A case now under treatment will illustrate this. A rather dreamy-looking individual came to me, after having been under the care of most of the leading physicians and surgeons in London, complaining that he suffered severely from nocturnal emissions. He was cauterized and recovered his health: he admitted he had never felt better, and, but for the emissions, would consider himself quite well. I could

¹ Donné, on the authority of Orfila, says, "Individuals that have been hung by the neck have been known even after death to have an ejaculation, and a semi-erection; I have examined the semen emitted in this way, and I have found it filled with animalcules, and containing living zoosperms." (p. 303.)

find nothing the matter with him; he had gained flesh, his former bright look had returned, but he maintained that he had had emissions sixteen times within the previous month. All that I could say was that his looks did not correspond with his statements. To convince me, he brought some of the emitted fluid, but I failed to detect in it any of the characteristics of semen. I am of course perfectly satisfied that this patient had no wish to deceive me, but I am equally convinced that he merely dreamed that emissions occurred, and that what he brought me was prostatic fluid.

Such cases deserve great commiseration, for they frequently arise from hypochondriasis, that strange psychological phenomenon which has often deceived me as well as other surgeons. Where it is present it often retards convalescence, as the invalid cannot bring himself to believe that he is recovering his health and vigour so long as he thinks himself subject to nightly wet dreams.

There is a popular belief existing that it is dangerous to attempt by the will to check emissions. This is as true and as false at the same time as many popular notions are. It is undoubtedly dangerous mechanically to prevent ejaculations, by attempting to compress the perinæum, or by the pressure of a cord tied round the penis, for in these cases the semen is merely forced back into the bladder, but not prevented passing from the vesiculæ seminales.

It is dangerous for a man to excite himself, or to allow his sexual feelings to be excited frequently, and by his will habitually to attempt to check emission; but it is not dangerous, nor is it attended with any ill consequences, so to train the will that emissions shall not occur, or—if in spite of our will they do commence involuntarily—to shorten the duration of the emission, which in a manner all can more or less do. The only exception that I know of is in the case subsequently reported, where temporary impotence occurred in a distinguished artist, who had much studied the nude figure, and by a strong will curbed his animal propensities; but even here I cannot say but that other causes may have produced the partial impotence.

Patients will tell you that they cannot control their dreams. This is only partially true. Those who have studied the connection between thoughts during waking hours and dreams during sleep know that the two are closely connected. The character is the same sleeping or waking. It is not surprising that, if a man has allowed his thoughts during the day to rest upon libidinous subjects, he should find his sleep at night traversed by lascivious dreams—the one is a consequence of the other, and the nocturnal pollution is a natural consequence, particularly when diurnal indulgence has produced an irritability of the generative organs. A will which in our waking hours we have not exercised in repressing sexual desires will not, when we fall asleep, preserve us

from carrying the sleeping echo of our waking thought farther than we dared to do in the daytime.

Tissot, who wrote more than seventy years ago, says:—"Occupied with ideas relating to the pleasures of love, given up to lascivious dreams, the objects which the brain paints for itself produce on the organs of generation the same movements which would have been produced during our waking moments, and hence the ejaculatory act is physically produced instead of being so only in imagination."—'L'Onanisme,' p. 222.

The PROGNOSIS of an ordinary case is very favorable, provided the patient will honestly aid the surgeon in effecting a cure. Even when nocturnal emissions are alarmingly frequent, occurring night after night, and sometimes more than once in a night, and perfectly prostrating the patient, still these discharges are quite under the surgeon's control. But at a later stage, when the emission has become a confirmed habit, a cure is not so rapid.

The disposition in the system to repeat an act and establish a habit once contracted is very curious. We notice it in children who wet their beds. Another instance is that of going to stool at a particular hour. Once establish the time of the bowels acting, and they usually act with regularity. The same rule is more or less true of emissions; if they occur one night they are likely to occur the next, and the next. The secret of success is to break the habit. The sooner this can be effected the better, and it should be attempted before the habit becomes imprinted on the system.

It is a fact so generally recognised that the reader need scarcely be more than reminded of it, that one nocturnal emission in a reduced constitution often weakens the subject of it much more than does connection repeated several times the same night by a healthy person. It is, moreover, a well-ascertained fact that erotic dreams attended with pleasure leave less weakness than when emissions occur without the cognizance of the dreamer. Explain this as we may, the fact is undoubted; but it is no more to be wondered at than that persons will undergo great exertions and perform extraordinary feats when inspired by hope, and confident of success. We may say such results depend upon nervous energy—others call it pluck. It is said that persons so circumstanced have a good tone to their system; that reaction takes place readily. Doubtless the brain or spinal cord plays an important part in the results we are describing, as well as in supporting the loss of semen, which some constitutions have the power of renewing much more readily than others.

Before concluding my remarks on this important subject I should wish to say a few words on the occurrence of dreams of a disgusting nature—a sort of satyriasis in dreaming. One instance must suffice.

A married man, of continent habits and no vicious propensities, suffered from a severe attack of diarrhoea, which he was recovering from and was consequently very careful about his diet, having the previous night taken little to drink or eat. Connection had not taken place for a fortnight. On awaking in the morning he found that an abundant emission had occurred, and the following is his account of the cause of the emission, taken down in pencil immediately after awaking:

He dreamt that while lying on the grass, a child, with hands covered with some sort of india-rubber elastic apparatus, was lying near him, who little by little approached closer until the sleeper felt his generative organs touched, and then manipulated by these india-rubber appliances. No sooner was the emission over than some men who had placed and trained the child started out of ambush and demanded money to compromise the matter. The sleeper felt most grievously his folly as well as the truth of the charge; then followed an indistinct recollection of the trial. At this stage the sufferer from the emission awoke to find the satisfaction that the whole had been a dream.

What can be more dreadful than the occurrence of such dreams? yet some patients suffer greatly in this way, and I have been consulted by persons who dreaded going to bed from a fear of such horrors.

PREVENTIVE TREATMENT.—In strong, robust young men the surgeon need not take much notice of emissions coming on once a week, but recommend the patient to avoid suppers, to abstain from tea, coffee, and tobacco, and to lie on hair or spring mattresses, instead of feather beds, and sleep with only a moderate quantity of clothing.

I recommend my patients to drink no fluid after dinner, supposing that meal to be taken at 6 or 7 o'clock. This, and regular evacuation of the bladder at bedtime, together with the advice to get up and make water as often as the patient wakes in the night, will singularly assist the treatment. A very little fluid will be sufficient to relieve any great thirst that may occur in the evening, but the rule should be, avoid drinking after 8 o'clock.

The sufferer should be told that emission usually takes place in heavy sleepers, and the best way of preventing this intense drowsiness in the morning is not to load the stomach over night with all sorts of indigestible and miscellaneous food. Care should be taken in regard to quantity as well as quality, and I should rather say to such persons, make your principal meal in the middle of the day, and let your evening meal be light. I do not advise a man to go hungry to bed, but I am convinced if a patient will judiciously attend to his diet, and in this respect exercise self-control, he may, without much assistance from his medical adviser, ward off frequent emissions. If, however, a young man will persist in gorging himself with what to his delicate stomach

is an indigestible meal, he must not expect that any means a surgeon has at his disposal will avail to prevent these losses.

Let me further remark, that if a man is disposed to emissions he should not allow himself to fall into a second sleep, but should rise early; in following out this plan there is no difficulty if the patient goes to bed at a reasonable hour. No doubt can exist that emissions most frequently take place in this second sleep; and it is equally certain that although a man awakes thoroughly refreshed from his first sleep, he may arise after having taken a second doze thoroughly prostrated. An early call, or an alarum clock, may cure many a patient better than all the preparations in the pharmacopeia. At first these early hours may disagree with him, but they soon become as natural as late ones were, and the patient feels a disinclination to lie in bed, equal to his old disinclination to get up early. Of course large numbers of patients will tell you that they feel so fatigued in the morning that they cannot get up. If more sleep is required—should be the answer—let it be taken in the daytime.

It would be a curious and important question for physiologists to investigate why the second sleep refreshes us so slightly when compared with the first? On awaking the first thing in the morning, most persons, and especially convalescents, feel refreshed by their night's rest; but if they go to sleep again, and rise say at ten, they remain languid all day. Perhaps it may depend in a great measure upon the first sleep being sounder and quieter, and not being disturbed by the dreams to which those who indulge in the second are liable.

The recommendation may be difficult, then, for young men to follow, but I have often thought of advising some of my confirmed cases to take a voyage on board ship, and keep the watches with the sailors, which allow of taking only four hour's sleep at a time, in the belief that this interruption of rest would break through the almost inveterate habit; but it is difficult in these, the worst forms, to induce the patient to use any self-restraint to cure himself; he wishes to rely on medicine, and will not give himself the trouble to exert self-will.

Another very valuable suggestion is to desire the patient to practise the habit of waking early in the morning, turning out of bed, and emptying the bladder. It is in the early morning, when the bladder is full, that emissions and erections take place. In such cases, if a patient rises at 5 or 6, and goes to bed early, he may altogether avoid emissions.

I believe this precaution of keeping the bladder empty at night to be more important than almost anything else in the simpler cases, and that it will be usually successful. I have known an enema of half-apint of cold water, used at bedtime, to work well where other means have not produced satisfactory results. It has been said that sleeping

between the blankets will prevent emissions, but I cannot say that I have any experience as to this remedy. Tying a towel round the waist, so as to bring a hard knot opposite the spine, will, by preventing the patient from lying on his back, often prevent emission at night. It is doubtless quite true that the close observer of his own symptoms finds himself generally lying on his back when the emission takes place, but it is equally certain that emission may occur when the patient lies on his side, as in the following case. One of my most intelligent patients notices that, on suddenly waking on the occurrence of an emission, he finds himself lying on his left side, his legs and knees firmly drawn up against the abdomen, and the erect penis prevented from gaining its natural position by the thighs. Trousseau. in the 'Gazette des Hôpitaux,' Mai 15, 1856, recommends an instrument to pass up the rectum to press on the vesiculæ, and mechanically prevent the emissions. I have tried the plan on one or two patients, but was obliged to leave it off, as I found that it produced considerable irritation; and even if such clumsy contrivances answered, it would only be by causing the semen to pass back into the bladder, and make its exit when the patient micturated. I should doubt if the instrument would prevent emission.

In the more obstinate cases mentioned under the head of Prognosis, p. 110, the greatest watchfulness over the thoughts and actions during the day is absolutely essential. I find that there are patients (and very intelligent ones) who have had the greatest difficulty in surmounting the disposition the brain has to summon up and apparently revel in lascivious images. Such persons are not generally strong minded in anything; they express a wish, but have not the courage to employ the energy which the medical man tells them they must use to carry out their purpose. And, most unfortunately for such persons, these frequent emissions react on the system, and render them less and less capable of exerting proper self-control.

In the present improved way of treating such affections this is the only class of sufferers who do not readily recover, and I cannot but repeat what I often tell the suffering—that if a patient will not and cannot practise self-control, he must not expect that his medical adviser will continue to take any further interest in his case, for let me assure him (as I am obliged to do some of my most rebellious patients) that when the surgeon sees no efforts made towards self-cure, he loses his own self-reliance and is apt to prescribe haphazard.

Too many patients are under the impression that all their ailments may be removed by a dose of physic, and disrelish the notion that it behoves them to exert themselves or to do anything except take the draught. For such persons medical skill can do nothing, and the patient can expect to gain no relief. Cauterization may indeed remove

morbid irritability from the urethra, and in cases where the emissions arise from this local cause, there is reason to hope that the reflex action on the chord or on the brain may cease. If the patient will co-operate with the surgeon, much benefit will result from the united action, but the operation alone is not sufficient. Constant supervision will be required, and if this is omitted, relapses are sure to follow.

In the more intractable cases of seminal emissions I should be disposed, at least with people of any strength of mind, to attempt the following plan, which Tissot recommended as far back as 1790. This author says, that since to break the habit is the first object, it is as well to go to the root of it at once, and accordingly recommends the following plan. I have met with one instance in which its manful adoption was attended with perfect success. "An Italian gentleman, of very high station and character, consulted me for quite a different affection; but in order to put me in possession of all the facts in reference to his state of health, he related his history. He had been inconvenienced five years before with frequent emissions, which totally unnerved him. He determined resolutely, that the very instant the image of a woman or any libidinous idea presented itself to his imagination, he would wake; and to insure his doing so, dwelt in his thoughts on his resolution for a long time before going to sleep. The remedy, applied by a vigorous will, had the most happy results. The idea, the remembrance of its being a danger, and the determination to wake, closely united the evening before, were never dissociated even in sleep, and he awoke in time; and this reiterated precaution repeated during some evenings absolutely cured the complaint."

This plan is founded on such true physiological grounds, that I feel convinced it must succeed in a great variety of cases. To carry it out, however, requires great firmness and resolution, and it will succeed only with those who have habitually exercised self-control.²

- 1 'L'Onanisme,' p. 241.
- ³ A letter I received on this subject some time ago from a very distinguished provincial physician is interesting, and corroborates the above statement as to the possibility of schooling the will so as to awake in time to prevent emission.
- "I had no such success," he says, "as to satisfy myself (in overcoming the tendency to emission during sleep), until I adopted the plan of being lightly clad in bed (on a mattress). When not in London studying, I never lay with more than a single sheet on the bed in summer, and a sheet and coverlet in winter, and one blanket extra during keen frosts. Even with this the abomination used to come on about once a month. Indulgence in wine or ale always made the erection more troublesome; but brandy invariably was followed by emission during sleep, without a dream.

 From what a medical friend told me that he had accomplished, I have learned so to school my mind during sleep, that I awake in time to prevent a catastrophe. The transition from the apparent reality of the dream to the consciousness that the scene is a dream which I must awake from, is very curious. The only occasions when I now suffer are after great fatigue, which involves a profound dream-

Curative Treatment.—When a patient consults me, suffering from the severer forms of the complaint, I almost invariably discover, on passing a bougie, an excessive degree of sensibility along the canal. This local cause reacts easily during sleep on the brain, which by reflex action brings on spasm, and hence the frequent emission, which is, as stated at p. 113, more or less under the influence of the will. In many instances the passage of an instrument once or twice a week will suffice to remove the morbid irritability, particularly if the treatment be accompanied with some slight astringent injection. It is singular to note the success of this treatment in cases that have resisted all other means previously adopted, such as tonics, &c., and when the surgeon has omitted to accompany his tonics with any local examination.

When, however, this produces no effect, I generally have recourse to cauterization (see treatment of spermatorrhea, p. 162), and I find that few cases fail to yield to the operation, which is attended with little or no pain when performed by a competent surgeon. Cauterization gives the permanent relief that, in the great majority of cases, nothing else will, and I have never yet had cause to regret having recourse to it. Those who decry the above method of treatment cannot, I venture to think, have employed it properly, for both theory and actual practice point it out, in my opinion, as the best means of checking the tendency. As soon as the excessive morbid sensibility of the canal of the urethra has disappeared, the will can assert its force, and then, if the after treatment recommended at p. 32 be followed, I am convinced that the health will rally, and it is often surprising to see how the whole physical condition of the patient will improve.

Successful as I have generally found this treatment, I must admit that even cauterization will not, in every instance, effect a cure. Every now and then I meet with exceptional cases where the irritation is not confined in the urethra; but either from neglect or from some strong hereditary tendency the habit has already—before any medical aid has been sought—had too serious an influence on the brain or spinal chord to be thus overcome. Instances like the above are the rare exceptions, and belong rather to the class of mental diseases, for the discussion of which this is not the place.

In the more severe cases of nocturnal emissions, by prescribing

less sleep. I do not know whether such things are common, but my father told me that he was very much troubled with wet dreams after he was sixty years of age; sexual desire and connection had ceased and did not return, yet the amount of the discharge was large and weakened him considerably.

I am.

Yours very sincerely,

W. ACTON, Esq.

opiate enemata in the proportion of sixty or eighty drops of Liq. Opii sedativ. to an ounce and a half of fluid before going to bed, and following the plan recommended at p. 115, a cure may generally be effected. In addition to the medical treatment, the patient should be advised to seek cheerful society, but at first to shun association with females. I need hardly add the obvious advice that he should, above all things, break off any acquaintance he may have formed with immodest women. His reading should be of a nature calculated not to tax the strength, and strict injunctions should be given to abstain from the perusal of any book containing allusion to the subject of his complaint, or any work which would be likely to produce erotic ideas.

SECT. IV.—DIURNAL POLLUTIONS OR EMISSIONS

These terms properly include any emission of semen, voluntary or involuntary, during the waking hours. The emission is not necessarily preceded by erection, or attended with pleasure.

A strictly continent man in good health, who follows the rules of healthy and chaste living, will notice little or no secretion from the urethra during the daytime.

We must, therefore, consider as abnormal all escapes of glutinous moisture or discharges which the patient notices during the day. If, however, the young man has been under sexual excitement, if he has been reading works of imagination, or looking at pictures that produce erotic thoughts, he must not be surprised if he notices escapes of glutinous secretions from the urethra during the daytime. It would indeed be a bad sign if such influences did not excite the susceptible, and it would bode ill for his generative organs when he married if these escapes did not occur. The sufferer who has read in quack books of the exaggerated consequences of these affections, particularly if, as often occurs, he happens to be of a hypochondriacal disposition, will endure great anxiety as to the results. I propose, therefore, making a few remarks upon these discharges.

I have already stated that, unpreceded by sexual excitement, escapes of semen occurring during the day are abnormal, and betoken an impaired state of health; but, at the same time, an occasional loss of even a teaspoonful of secretion will not alone bespeak disorder of the function. It is the repeated escape or leakage, so to speak, that betokens a relaxed condition of the generative apparatus. I admit that great exaggeration has been indulged in upon the subject, but those are equally blameable who assert that the symptoms of debility, exhaustion, and impotence, cannot ever depend upon this drain of

semen. In practice, we find that this escape of semen, when occurring once or twice a day, or every time a patient makes water,—goes to the water-closet,—or suffers from sexual excitement,—is attended with a train of symptoms which have a very prejudicial effect on the constitution of a large number of susceptible adults.

It is very easy for cynics to ridicule the idea that the mere escape of a little fluid should be attended with such serious nervous depression. We must recollect that we are speaking of the loss of semen¹ in an already exhausted individual. No one who has seen much practice can deny the statements of such patients, that one nocturnal emission will debilitate such sufferers for a week; then why, I would ask, disbelieve that one diurnal emission does not produce a similar effect on the already exhausted sufferer? And often such patients will tell you that these losses occur several times a day.

I am ready to admit, however, that the hypochondriacal may exaggerate the influence of these losses, and that possibly what they suffer from may depend upon what they imagine they suffer.² But whilst taking into consideration all these circumstances, the statements are repeated too often not to satisfy me that a series of well-marked symptoms, namely, those of exhausting nervous power, attend and follow those diurnal losses. Indeed, they require very accurate diagnosis and appropriate treatment.

If, then, we come to the conclusion that in the daytime emissions may occur which may give rise to a train of very distressing symptoms, the first question we have to discuss is as to what they consist of. I would lay it down as a rule that these discharges are not necessarily composed of semen. I am rather disposed to believe that in the majority of cases the exuding fluid is principally composed of those other secretions which are intended to mix with the semen previous to its ejaculation, such as the fluid coming from the vesiculæ seminales and the prostate gland. I am, however, equally certain that in a large number of other cases semen does form a part of the emitted discharge, and when this is the fact it must be considered in determining the line of treatment.

- ¹ See what semen is composed of, at pp. 118 and 122.
- There is a circumstance that must not be lost sight of by the judicious practitioner in the treatment of these cases, namely, an invalid may pass a secretion which he considers or fancies to be semen, but which is only mucus mixed with semen or fluid secreted by the prostate or vesiculæ seminales. In such highly nervous and susceptible individuals, ignorant, moreover, of its true nature, the leakage of this fluid will have a highly detrimental effect on their health and condition. When we notice how some men will concentrate all their thoughts on these sexual subjects, who have never read a quack book or been frightened by alarming details, the practitioner will not be so much surprised at the importance to be attached to an otherwise comparatively harmless circumstance,

When any such secretion is observed to proceed from the meatus of the urethra, the immediately exciting cause is generally one of the following three—sexual excitement, defectation, or micturition.

DISCHARGES ARISING FROM SEXUAL EXCITEMENT.—In one sense all discharges of this kind take their rise from sexual excitement, for neither by common observation nor the microscope can we detect fluid of any kind habitually coming from the urethra at any moment, unless the patient has been lately and previously subject to more or less sexual excitement. In a state of health there can be no leakage (so to speak) of semen from the system. Under the influence, however, of sexual desire, a tenacious, transparent fluid frequently oozes from the meatus. Nervous patients pay great attention to this, and will tell their medical adviser a variety of circumstances that they have noticed attending it, and describe the qualities of the discharge with painful minuteness.

Instead of viewing this as an abnormal symptom, I have often to tell my patients that it would be very surprising if, under excitement, some such discharge did not occur. If it betokens anything, it is a sign that the patient is potent, as the non-emission of a small quantity of fluid under excitement usually betokens a want of power.

If, however, under very slight excitement—friction of the trousers, &c.—a large quantity of fluid comes away, say a teaspoonful, and if this, instead of being an occasional occurrence, is frequently repeated during the day, or if it occurs without having been preceded by any erection, then the semen, prostatic fluid, or secretion from the vesiculæ seminales (for, on microscopical examination, it may be found to be or contain either or all of these), may be said to flow away in an abnormal manner, and the case requires medical supervision.

There are cases in which the slightest sexual allusion or thought—or the least exercise that tends to increase the susceptibility of the genital organs—such as riding on horseback, sitting in a carriage or a railway train, will occasion an escape. In such a state of things medical assistance should always be sought, more especially if the general health suffers, or the patient acquires that careworn haggard look which a skilled eye detects at once as dependent upon sexual derangement. Proper surgical care will arrest the discharge if taken in time. But amenable as this special symptom is to cure, it must not be forgotten that, if the general health has been seriously impaired, the renovation of the constitution may be a far slower and more difficult matter.

DISCHARGES DUBING DEFECATION.—If the bowels are not habitually confined, they will usually be relieved without any secretion being forced from the urethra; but in many persons a hard stool will cause a small quantity of liquid to pass from the meatus each time the

bowels are evacuated, or at least whenever any straining takes place. This must not be considered as an abnormal symptom; it depends upon the hardened fæces mechanically pressing on the prostate (t) or vesiculæ seminales (l, see diag., p. 104) and driving forward their contents, which thus exude from the meatus. As soon as the bowels cease to be confined this oozing ought at once to cease. When, however, each act of defecation is attended with the discharge of a considerable quantity of fluid from the urethra the case is one requiring medical interference. As in the last case, excess in the escape is a local sign of an unnatural condition of the canal of the urethra.

The best remedy for this is to relieve the habitual constipation. Mild remedies will often suffice. A little fruit or a draught of cold water (half a pint to a pint) taken immediately on rising in the morning, or brown bread instead of white with meals, will frequently give great relief. Another very good plan is to commence breakfast with a saucerful of oatmeal porridge.¹

The administration of a wineglassful of Frederichshall water, in a tumbler of lukewarm water, on rising in the morning, before dressing, will often regulate sluggish bowels. When this fails Pullna water may be tried, or in other instances Carlsbad salts, a tablespoonful dissolved in hot water, and cold afterwards being added, will effect the same purpose.

Taking an additional pint of cold water with the meals will often suffice. In other cases I have treated constipation by desiring my patient to take a tablespoonful of oil daily with his meals. It is by ringing the changes on these plans, and enjoining daily exercise, that a cure must be effected.

DISCHARGE DURING MICTURITION.—In a perfectly healthy individual, who has not been recently subject to sexual excitement, the urine ought to be passed clear to the end, the last drops being as transparent as the first. If, however, sexual excitement has been indulged in, the first as well as the last drops of urine may be somewhat thick, and, if collected and examined under the microscope, traces of spermatozoa may be discovered in them. Such an occasional slight discharge is quite different from the waste known as a diurnal pollution. In cases, however, where the least amount of straining to

As a cook may not understand how to make the Scotch dish, I append the following directions from Tegetmeier:—"Strew oatmeal with one hand into a vessel of boiling water (to which salt has been previously added), so gradually that it does not become lumpy, stirring the mixture the whole time with the other. After the requisite quantity has been stirred in—namely, about two large handfuls of coarse oatmeal to a quart of boiling water—the whole should be allowed to stand by the side of the fire, so as to simmer gently for twenty-five or thirty minutes. During this time it thickens considerably. As thus prepared it is usually eaten with the addition of milk.

make water, or indeed very slight effort, invariably causes a certain quantity of gelatinous fluid to exude after the last drops of urine have been expelled, while at the same time the microscope shows that this fluid contains spermatozoa, and the general health is noticed to suffer from its abundant expenditure, the medical man should at once be applied to.

I am daily becoming more and more convinced that a very considerable proportion of people who are constantly ailing rather than ill, whose health is impaired, whose spirits are low, and who derive no benefit from tonics, change of air or doctors—suffer, in fact, from loss of semen, brought about by marital or other sexual excesses, or in one or more of the ways just specified. I have more than once alluded to the fact that loss of semen (in whatever way caused) induces a peculiar train of symptoms that are very marked and common to all such cases. The usual treatment for affections of the stomach, or the liver, or the heart or the lungs, is futile, so long as the system is being thus exhausted. Physicians frequently do not suspect that this seminal drain on the system is the cause of the patient's suffering; or if they do, hesitate even to allude to such a source.

I cannot help thinking that the professional ignorance evinced of what is at least a possible cause of such symptoms, is one of the reasons for the success of the quacks who fatten on the fears of hypochondriacal or conscience-smitten patients. If the true cause of these ailments is forgotten, or put out of sight, the patient is not likely to get well, or the medical man obtain much credit for cures.

Diagnosis.—Grave errors have been committed in diagnosing these secretions. A discharge consisting only of mucus from the bladder, or composed of phosphatic deposits, which in nervous subjects pass away like so much cream or milk, and in surprising abundance, is often taken for true seminal fluid, to the great alarm and serious detriment of the patient. These phosphatic deposits, which occur at certain times of the day, generally after breakfast, and most abundantly in damp weather, have been often mistaken for semen. Cases are often sent to me from the country, even by medical men, and I am told the sufferers labour under diurnal emissions, but, on examination, I find that it is only the phosphates, and not semen, which cause the peculiar appearance in their urine. However, it is no wonder that these white secretions should alarm the patient; the hypochondriac fully believes that it is semen that is passing away; and curiously enough, the general depression which attends the profuse discharge of these deposits bears a close resemblance to that following loss of semen. Simple microscopic and chemical tests will, however, speedily clear up the difficulty. The addition of a little nitric acid to the suspected fluid containing the phosphates will at once, in clearing the

urine where its turbidity depends upon the phosphates, render the diagnosis certain, and convince both the medical man and the patient that semen is not present.

Donné, who has made the microscopic examination of semen his especial study, says—"At the moment that semen is ejaculated, the zoosperms move about so rapidly that the eye can with difficulty follow each separate animalcule. They move in all directions in the fluid, just as so many eels would do, by means of their tails, overcoming obstacles in the current, avoiding obstructions, and in fact possessing and exhibiting the power of locomotion to the fullest Little by little, however, their movements diminish in rapidity and energy. This depends on two causes—1st, by the actual diminution of the vitality of the spermatozoa themselves; and 2nd, by the condensation of the liquid in which they exist, and which evapo-Their progression becomes more difficult, soon they only oscillate, and it seems as if they were held in consequence of their tails becoming fixed in the viscous fluid. They cease to move, and, in fact, die. I have, however, seen the movements of these zoosperms last for hours, even days, provided care be taken to protect the fluid in which they are, from evaporation and from cold."—Cours de Microscopie.

Such appearances as the above are quite sufficient to distinguish semen from all other fluids under the microscope. But I need scarcely say that this way of attempting to distinguish semen avails little when it is passed in the urine. As soon as the spermatozoa become mixed with that fluid, they die and are not to be looked for in the fluid, but are only to be met with at the bottom of the vessel. Their discovery under these circumstances is not so easy as Donné's account would lead us to suppose.

To the naked eye I know of no means by which one secretion coming from the urethra can be distinguished from another. Even when diffused in the urine, semen presents no particular appearances; and we cannot distinguish it from the mucus that is often suspended in the urine in the form of a cloud, entangling sometimes epithelial scales, and at other times semen.

Prognosis.—Lallemand: has greatly exaggerated the unfavorable prognosis of semen passed in the day when he says—"Diurnal pollutions are (other things being equal) much more difficult to cure than nocturnal emissions; and seminal emissions which attend the simple passage of the urine are more serious and more obstinate than those which take place during the effort of straining in defecation. In a word, experience proves that the severity of spermatorrhœa is proportioned to the ease with which it takes place, and common sense would predict such a result," (Vol. i, p. 627.)

"In cases where the generative organs are still uninjured, and the constitution is healthy, seminal emissions will be only voluntary, and if the digestive powers are good we may promise a speedy reparation. But if irritation has already attacked the spermatic organs and an abundant supply of semen escapes daily, or several times a day, without the patient's knowledge, the digestion will become deranged, and the power of erection, as well as pleasurable sensation, will diminish." (p. 472.)

I have met with instances where pleasure was diminished, and the power of erection was certainly less. But I do not consider that even these symptoms are proof that the case is *pro tanto* incurable. On the contrary, in by far the greater number of patients all local distress or weakness, when appropriately treated, may, with little difficulty, be permanently removed.

TREATMENT.—The same or similar treatment to that already pointed out as the best for nocturnal emissions should be followed where the disease is still in the condition of diurnal emission merely. It is then, to a very great extent, amenable to the will and to medical treatment. When it assumes the form of spermatorrhæa, the treatment detailed hereafter under that head should be adopted.

CHAP. III.—THE EMITTED FLUID SEMEN

WE now come to describe the third of the subjects specified at p. 75 as indispensable for the due performance of copulation, namely, a due amount of well-formed semen.

PART I

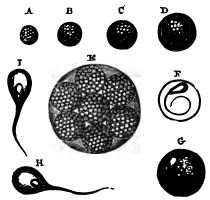
NORMAL CONDITION OF THE SEMEN

Composition of Semen.—"Pure semen," says Carpenter, "is a milky fluid of a mucous consistence, and neutral, or slightly alkaline reaction. The imperfectly developed spermatozoa are composed of an albuminous substance, the quantity of which diminishes with their progress towards maturation; so that the perfectly developed semen contains no albuminous compound. On the other hand, the principal component substance of the mature spermatozoa is the same with that which is the chief constituent of the epithelia, and of the horny tissues generally; namely, the 'binoxide of protein' of Müller. Besides this, the spermatozoa contain about four per cent. of a butter-like fat, with some phosphorus in an unoxidized state (probably combined with the

fat, as in the phosphorized fats of the blood-corpuscles and of nervous matter), and about five per cent. of phosphate of lime. The fluid portion of the secretion is a thin solution of mucus, which, in addition to the animal matter, contains chloride of sodium, and small quantities of alkaline sulphates and phosphates. The peculiar odour which the semen possesses does not appear to belong to the proper spermatic fluid, but is probably derived from one or other of the secretions with which it is mingled.

"THE MODE OF EVOLUTION of the spermatoza is such as to indicate that these bodies are true products of the formative action of the organs in which they are found, and cannot be ranked in the same category with animalcules. They are developed in the interior of cells, or vesicles of evolution, such as are visible in the semial fluid in various stages of production (figs. F, G, H, I), and have been known under the head of seminal granules.

"These appear to have been themselves formed within parent cells, which are probably to be regarded as the epithelial cells of the tubuli seminiferi, constituting, like the analogous cells of other glands, the essential elements of the spermatic apparatus. These parent cells are sometimes observed to contain but a single vesicle of evolution, as shown at D; but more commonly from three to seven are seen within them, as in E.



A, B, C. Single vesicles of evolution, of different sizes, from the seminal fluid of the dog. D. Single vesicle, within its parent cell. E. Parent cell, enclosing seven vesicles of evolution. F, G. Vesicles containing spermatozoa in process of formation. H, I. Spermatozoa escaping from the vesicles. (Copied from Wagner and Leuckardt.)

"When the vesicle is completely matured it bursts, and gives exit to the contained spermatozoa. The spermatozoa are not normally found free in the tubuli seminiferi, although they may be there so far advanced in development that the addition of water liberates them by occasioning the rupture of their envelopes. In the rete testis and vasa efferentia the spermatoza are very commonly found lying in bundles within the parent cells, the vesicles of evolution having disappeared; and they are usually set free completely by the time that they reach the epididymis, though still frequently associated in bundles. The earlier phases are occasionally met with, however, even in the vas deferens."

That the essential elements of the spermatic fluid are the spermatozoa, may be reasonably inferred from several considerations. There are some cases in which the liquor seminis is altogether absent, so that they constitute the sole element of the semen; but they are never wanting in the semen of animals capable of procreation, though they are absent, or imperfectly developed, in that of hybrids which are nearly or entirely sterile. Moreover, it may be considered as certain that the absolute contact of the spermatozoa with the ovum is requisite for its fecundation. This appears from the fact that, if the spermatozoa be carefully removed from the liquor seminis by filtration, the latter is entirely destitute of fertilising power. Hence the presence of the liquor seminis must be considered as merely incidental, and as answering some secondary purpose either in the development or in the conveyance of the spermatozoa.

Müller says—" Not only are spermatozoa absent from the semen of many animals, and particularly of birds—except at the pairing time—but the development is imperfect in hybrid animals, which are generally incapable of reproducing their kind, or at most pair with individuals of one of the unmixed species, and produce forms which then return to the original fixed type. Hebenstreet, Bonnet, and Gleichen, all failed to detect spermatozoa in the semen of the male mule." (Vol. ii, p. 1478.)

SECRETION OF SEMEN.—Carpenter says, in his 'Comparative Physioology,' p. 533—

"The development of the spermatozoa is, in most cases, periodical, man and most of the domesticated races being the only animals in which there is a constant aptitude for procreation. The spermatic organs, which remain for long periods in a state of atrophy, at particular times take on an increased development, and their product is then formed in great abundance."

The secretion of semen takes place slowly in the continent man—so slowly that, in fact, in many instances, I think little or none is formed in healthy adults whose attention is not directed to sexual subjects, and who take a great deal of strong exercise. The same may be said of animals that are not allowed sexual congress.

QUALITY OF THE SEMEN.—Semen, as we shall show (p. 126), when first secreted, is not the same elaborated fluid which we find in the

^{1 &#}x27;Human Physiology,' p. 791, fifth edition,

vesiculæ seminales. "The complete development of the spermatozoa in their full proportion of number is not achieved till the semen has reached, or has for some time lain in, the vesiculæ seminales. Earlier after its first secretion, the semen contains none of these bodies, but granules and round corpuscles (seminal corpuscles), like large nuclei enclosed within parent cells. Within each of these corpuscles or nuclei a seminal filament is developed by a similar process in nearly all animals. Each corpuscle or nucleus is filled with granular matter; this is gradually converted into a spermatozoid, which is at first coiled up, and in contact with the inner surface of the wall of the corpuscle."

—Kirkes, 7th edition, p. 735.

With respect to these vivifying agents, the spermatozoa, the microscope shows that specimens of semen differ much; that in some persons it is, so to speak, permanently immature, and that in other instances it may be so temporarily.

Whether the semen is secreted as required, or stored up, is some-On the whole, it seems to me, after considerable investigation, pretty clear that the semen is stored up and elaborated in the vesiculæ seminales. It is tolerably certain that the testicles do not necessarily go on continually secreting, but cease when there is no further occasion for their action. What makes this very probable is the fact that the vas deferens (see diagram, k, p. 104) is generally found empty in men who have been long removed from the society of women. As the semen is secreted in the testes (f) it is, I believe, pushed forwards into the vasa deferentia (k), and thence is deposited in the vesiculæ seminales (e), and, while there, mixed with the secretion of these organs, and is then ready for use at an instant's notice. It is owing, I believe, to its previous secretion, elaboration, and storing up, that emission occurs under slight mental or physical causes. semen were not thus ready at a moment's call, much more preliminary excitement than that usually required to produce nocturnal emission would be necessary to cause ejaculation. In some animals, however, this storing up does not and cannot occur, as they have no vesiculæ seminales. But in most of these cases there are means for attaining the same end—the elaboration of the semen—as, for instance, the dilatation of the vasa deferentia. Thus, "In the horse this portion of the duct is extremely thickened by the occurrence of numerous glandular cellules in its walls. Much the same condition is met with in the bull. In the elephant each vas deferens, when it arrives at this point, enlarges into a cavity of considerable size, which it is evident may readily, and no doubt does really, fulfil the function indicated by the words vesiculæ seminales."—Pittard, 'Cyclop. of Anat. and Physiol.,' vol. iv, p. 1431.

A very important difference, however, between most animals and

man is, that man has no rutting season. Man may require his semen at any moment; and the vesiculæ seminales supply his need. Most animals, on the contrary, requiring semen only for a short time, produce enormous quantities with great rapidity, and probably expend most of it as it is secreted. The periodic enlargement of the testes, and the other changes noticed at the rutting season, supply this requirement. The animal system answers wonderfully to these sudden demands. We observe a similar process when nature is called upon for sudden and extraordinary supplies of horn and bone. Bone, we know, grows very slowly under ordinary circumstances; it is often deposited round fractures in less quantities than we wish it; yet such is the lavishness of nature when called upon, that a stag's antlers will be replaced fully in eleven weeks.

The injected preparation made by John Hunter of the testes of animals that have a rutting season shows how a healthy male may secrete an almost unlimited quantity of semen for a short time. It should, moreover, be borne in mind that the animal has two testes, only one of which probably is drained at a time, and a large quantity of semen is probably hoarded up in the testes and vasa deferentia.

THE QUANTITY OF SEMEN ACTUALLY EMITTED IN EACH SEXUAL ACT IN MAN amounts, generally, to two teaspoonfuls or one, according as the male has been continent or not. Of course, the whole of this emission does not consist only of pure semen. The secretion, as it leaves the meatus, is a heterogeneous compound. Pittard thus describes it:-- "Some dilution, some addition to the volume, seems necessary in order to obtain an efficient injection of the life-giving fluid. And the quantity actually emitted by a man amounts, by all accounts, to two or three drachms. There has, therefore, been an addition somewhere. The prostate has doubtless contributed its share; the tiny glands of Cowper theirs; the urethra has given its mite of mucus, more mucus is waiting in the vagina; and I believe that the vesiculæ are not behind in adding a portion of their ready-formed contribution to the general stock. The spermatozoa, huddled and crowded in countless millions in the vas deferens, are now able to disport themselves at ease in the congenial medium, and the number contained in a few drops of pure semen would be sufficient to people abundantly several drachms of fluid."—Pittard, in 'Cyclop. of Anat. and Phys., article "Vesiculæ Seminales."

INFLUENCE OF SECRETED SEMEN ON THE SYSTEM AT LARGE.—It is a generally received impression that semen, after having been secreted, can be reabsorbed into the circulation, giving buoyancy to the feelings, and the manly vigour which characterises the male. This opinion has, it appears, given rise to the celibacy of the priesthood.

In the article on eunuchs 1 in the 'Dictionnaire des Sciences Médicales,' p. 448, it is stated that no eunuch can now be received into the priesthood of the Catholic Church; "for although," adds the writer, " priests are required to observe a moral eunuchism, inasmuch as they must be bachelors, still they must have the merit of resistance to the thorns of the flesh, to obtain la palme de la récompense. There are, moreover, other considerations. Not only has it been desired to disembarrass the priest from the cares of a family, as the shepherd of souls, in order that he should charge himself with the great flock, but it has been intended to give to him a great moral energy, the result of chastity and celibacy, in order the better to direct other men. In fact, who is ignorant that the semen, reabsorbed into the animal economy, when it is not emitted, augments in an astonishing degree the corporeal and mental forces? This powerful vital stimulant animates, warms the whole economy, places it in a state of exaltation and orgasm; renders it in some sort more capable of thinking and acting with ascendancy—with a superiority, as we equally observe amongst animals in the rutting season.

"This state contributes so much to courage and vigour that the athletæ and gladiators were forbidden sexual intercourse from this cause, and the same was recommended to warriors: Moses directed the Israelites in war time not to approach their wives."

In former editions of this work I was not prepared to entirely acquiesce in these opinions of the reabsorption of semen, but I am now disposed to think that semen, after it has been secreted by the testes, must be taken up again and carried into the general circulation, there to produce effects on the system that are only noticed in men and

¹ The following account of the mode of rendering a man a eunuch, employed in the present day, is given by Dr. Morache in his recent account of China.

The patient, be he adult or child, is, previously to the operation, well fed for some time. He is then put into a hot bath. Pressure is exercised on the penis and testes, in order to dull the sensibility. The two organs are compressed into one packet, the whole encircled with a silk band, regularly applied from the extremity to the base, till the parts have the appearance of a long sausage. The operator now takes a sharp knife, and with one cut removes the organs from the pubis; an assistant immediately applies to the wound a handful of styptic powder, composed of odoriferous resins, alum, and dried puff-ball powder (boletus powder). The assistant continues the compression till hæmorrhage ceases, adding fresh supplies of the astringent powder, a bandage is added, and the patient left to himself. Subsequent hæmorrhage rarely occurs, but obliteration of the canal of the urethra is to be dreaded. If at the end of the third or fourth day the patient does not make water, his life is despaired of. In children the operation succeeds in two out of three cases; in adults, in one half less. Poverty is the cause which induces adults to allow themselves to be thus mutilated. It is said to be difficult to distinguish these last from ordinary Chinese men. Adult-made eunuchs are much sought after, as they present all the attributes of virility without any of its inconveniences. - Dic. Ency. des Sciences Médicales; article China, p. 205.

animals who enjoy virility. It is not certain elements remaining in the blood, and not eliminated from it, which produce manly vigour or virility; if so, castration would produce it, instead of preventing its development. For true manly vigour to be apparent, it would seem as if the animal should be in good health, with sound organs generally; the testes should be normal and equal to the secretion of laudable semen, and to the retention of it so long as may be required in the natural reservoirs adapted to the purpose.

There are, moreover, many facts which it is quite impossible, as it seems to me, to explain without believing that semen is really absorbed.

The effect of castration on the system is, as I stated above, almost sufficient, alone, to lead to the inference that semen is reabsorbed. semen has an influence on the system is obvious, from the marked differences between castrated and non-castrated animals. These differences cannot depend upon anything retained in the blood, and not excreted. The vigour of the uncastrated animal must depend upon the testes secreting semen—that is, taking its elements from the blood. This semen is slowly secreted by the testes (f), and passes slowly along the vasa deferentia (k) towards their terminations, which are dilated, and some passes into the vesiculæ seminales (1), there and along the course of the vasa deferentia absorption most probably takes place. (See diagram, p. 104.) Admitting, then, as I now do, the reabsorption of semen, I am disposed somewhat to agree with Haller, that "the greater part of the semen—that which is the most valuable and the strongest smelling, that which has most force—is pumped back again into the blood, and there produces, as soon as it reaches the circulation, changes the most marvellous - the beard, the hair, the horn; it alters the voice and the manners; for age does not produce these changes in animals, it is the seminal fluid alone which can effect this, as we never remark these changes in eunuchs." -Primæ lineæ Physiol., § 790.

Accurate observation and physiology render it probable that semen, or at least a portion, with its spermatozoa, is absorbed through the ordinary channels; the other portion of secreted semen may, like other secretions that have not a free outlet, undergo fatty degeneration in the tubuli, and be carried away like other effete matter by the absorbents.¹ Should my readers require further proof on this point, I may again cite the fact that losses of semen arising from masturbation, nocturnal pollutions, or sexual excesses, enervate the sufferer and reduce him to a condition exactly opposite to that resulting from continence. I therefore come to the conclusion that semen plays a most important part in the human economy, and can be ill spared in the healthy, vigorous adult.

As competent authorities may differ on this subject, I subjoin the opinion of

If I were asked how does the system rid itself of the superabundant semen, I should answer first in the words of Kölliker:

." In Man the capability of producing semen, assuredly, always exists; although it does not appear to me to follow from this that semen is being continually formed, and that what is not emitted undergoes absorption; and consequently it seems justifiable to suppose that the seminal tubes secrete semen only when the secretion has been partially evacuated externally—either in consequence of sexual congress or of seminal emissions—and an excitement of the nervous system has caused an increased flow of blood to the testis."—Manual of Histology, vol. ii, p. 241.

If this be the case, then we have not to account for much secretion in continent men. In others, I believe, nocturnal emissions will carry off a good deal; the effects of defecation and micturition will also dispose of some. But, admitting all this, I think we must infer that even in the testis itself absorption must take place, as we notice that the semen is secreted and disappears even when the vasa deferentia are tied, or when inflammation has blocked up those canals, so as to prevent the egress of the spermatic fluid.

I was in the year 1864 consulted by an eminent physician who had very accurately observed his own symptoms. There was a turgid condition of the testes, attended with pain. This gentleman told me that formerly, while leading a continent life, nocturnal emissions had occurred; but that latterly, when his wife was away from home, no emissions took place, and the testicles had become enlarged and painful. He considered this condition arose from the testes being, as it were, choked with semen, and had experienced, he said, great relief from occasionally taking Epsom salts and magnesia, and he attempted to solve the problem as to what became of the secretion by supposing that these aperients promoted the absorption of the semen, causing the vessels to take it up, but he failed to explain what set of vessels were the agents

Kölliker. He says—"There are no certain facts in favour of an absorption of the semen when formed, which could only take place in the vasa deferentia and vesiculas seminales; for what is observed in animals after the rutting season is over, has no reference to this point; and the very circumstance that in the situations above mentioned, no traces of a disintegration of the semen are ever found, appears to be very much opposed to such a supposition. At the same time, however, it is, perhaps, unquestionable that, without seminal evacuations, a formation of semen may be possible; for it is sufficiently established that a rich heating diet, and an unsatisfied sexual excitement, often produce a turgescence of these organs, attended with painful sensations, and most probably with a formation of semen. The subsequent removal of this fulness does not, however, appear to me incontestably to prove any absorption; because a difference in the quantity of blood in the testes, and the passing of the semen into the vasa deferentia, are sufficient to account for the restoration of the usual condition."—('Manual of Histology,' p. 241.)

in this absorption. This, however, is the material point, for, according to him, the absorption under the influence of the aperients was rapid. My own opinion, however, was, as I told him, that his symptoms probably arose simply from ungratified sexual excitement.

It may be interesting if I add here a few facts with regards to animals which may seem to throw a light on this at present obscure subject. Sir Philip Egerton says—

"Fawns, when cut prior to the formation of any horn—that is, within a week or so after birth—both testes being wholly removed, with a portion of the cord (vas deferens) also, will never bear horns, however long they may live; but if the bodies of the testes only be taken away, the 'knob' (epididymis) being left attached to the cord, the animal will have horns, and renew them annually, the shedding being always rather later in the season, and the velvet covering remaining for a somewhat longer period on their surface than with the entire buck; and, further, they will be more slender in the beam, and more porous in their internal structure. These semi-castrated—if I may so style them—animals will go into rut, but not to the degree which produces emaciation; nor does the great thickening of the neck occur which is so characteristic in the perfect animal during that peculiar season; nor are they capable of procreation. When the adult buck is castrated, the horns are shed shortly afterwards, and renewed; but the persistent periosteum, or 'velvet,' never separates from their surface, and the horns do not again fall, but remain attached during any period the animal may survive. These permanent antlers are often more developed than those produced by entire bucks of equivalent age, which I think may be well accounted for from the fattened state, and the longer influence, from the continued adherence of the vascular integument by which the horns are formed. I may here observe, that circulation continues in the bone or horn after the periosteum has separated, and that, diminishing by degrees, first from the points, the vessels become obliterated, and vitality therefore ceasing, it is cast off." -Gascoine, "On Castration of the Cervidae;" 'Proceedings of the Zoolog. Soc., June, 1856, p. 156.

I have attempted to settle the question of the influence of semen on the system, by inquiries amongst those who have the largest opportunities of studying the subject amongst entire as well as gelded animals, with relation to the enduring qualities in males and females, and this is the information I have arrived at.

There can be no doubt that entire horses are capable of undergoing more work than geldings. It is a saying in Norfolk, that a stallion is equal in draught to one gelding and a half. One such horse is often kept on a farm, and works a certain number of months in the year when not required for breeding purposes. The farmer then puts him by,

and receives thirty or forty pounds for his mounting services. Such entire horses are not, however, always tractable, which is the reason they are not employed more frequently in England. And the correctness of this opinion has been corroborated by one of the best and boldest riders in England, who tells me that he has seen and ridden entire horses with the hounds, but that they soon shut up in the hunting field; they grow sulky, and refuse to go. He says on this score they are objectionable; and he gives a stallion a wide berth, as they bite occasionally, and are very vicious. Besides, their tempers are generally uncertain. Although their endurance might be good, it would be rather in draught, he should think, that they might be used. Experience has taught him that they are not adapted for hunting, although they may do for hacks; and here often the same bad temper interferes. He has ridden good geldings as well as good mares, and cannot say which he prefers.

At Tattersall's a gelding is always worth, ceteris paribus, £5 more than a mare; this is probably because a mare is liable to kick at the time of horsing. I myself object to drive mares on this score, as no one can be sure of their tempers when in this condition.

I was talking the other day to the manager of a large cab company, and remarking on the number of mares the company possessed. "Yes," said he, "geldings, we find, are not equal to do the thirty miles a day we expect out of our Hansom cab mares, and we purchase only this description of animal, as suited to our work."

Any one who has travelled much in France must be aware of the fact that stallions are used by preference for all draught purposes; and by means of hard work and driving in teams together they are made very gentle, even though well fed and in excellent condition.

PART II

DISORDERS AFFECTING THE SEMEN

WE have now to consider the abnormal or unhealthy conditions which, by influencing the semen, may interfere with the due performance of the sexual act.

SECT. I.—INFECUND SEMEN

Though the terms are often used loosely as synonymous—"want of power to produce its like" (Barclay)—unfruitfulness (infécundité) is not impotence. A man may be unable to beget children, and yet not

be impotent, though an impotent man is, of course, unable to beget children.

This state may last a short time, or it may be permanent. Rest may give the semen time to become perfect, or ripen, and the spermatozoa may reappear and become mature. Stricture, again, as we shall presently see, may make a man practically sterile, and so may other affections of the testes or generative organs. Not that infecundity—meaning by that term the lack of children—necessarily rests with the man alone, the cause of non-impregnation may depend wholly or partially on the female.

INFECUNDITY IN THE MALE.—Science is very deficient in any accurate examination of the state of the seminal secretions. It is a field still open to the examination of strict observers, and would amply repay the trouble.

Dr Davy, Assistant-Inspector of Army Hospitals, at the General Military Hospital at Fort Pitt, published in 1858, in the 'Edinburgh Medical and Surgical Journal' for July, vol. xl, p. 1, a very interesting examination of twenty post-mortem appearances of men who, dying of various diseases, were examined by him.

From this paper I have condensed the following table. The details are reported at great length, as well as the causes of death; the postmortem appearances, not only of the organs generally, but a minute examination of the secretions found in the vesiculæ seminales, as well as the microscopical character of their contents, are given.

The object-glass used was one of one-eighth inch focal distance, constructed by Moss.

It would appear from the above examinations that there is but little difference in the *microscopic* character of the fluid found in the vasa deferentia (k) and in the vesiculæ seminales (l). (See Diagram, p. 104.)

In the vasa the *quantity* is smaller, and appears to be in transition from the testes, where it was secreted, into the vesiculæ, where it is retained and mixed with other secretions.

The fluid found in the vasa deferentia is generally creamy or purulent looking, and is liquid and small in quantity. That found in the vesiculæ is more abundant, of a brownish colour—the brown tint increasing after death—and is occasionally tinged with blood. The colour, however, may depend upon post-mortem appearances. The two vesiculæ may differ in the quantity of fluid they contain. One may be empty, the other more or less distended.

In consistence the fluid in the vesiculæ varies, being sometimes thin like starch, but more frequently thick, viscid, and gelatinous. After standing a few hours it separates into two parts; the one which subsides being opaque, while the other is transparent; the latter is copiously precipitable by alcohol, and becomes almost gelatinous.

1			I	
No. in Mono- graph.	Age.	Condition of Vesiculæ Seminales.	Condition of Vasa Deferentia.	Examined hours after death.
4	20	Slightly viscid; brown tint	Starchy	11
10	20	Starchy, and gelatinous	Few animalcules; not brown	4
11	27	Partly thick and partly thin secretion		10
14	27	Few spermatozoa, but glo- bules	Healthy, with few spermatic animalcules	32
15	27	Gelatinous; well-formed ani- malcules	bules	12
13	29	Gelatinous, thick, globules	No fluid in	3
1	30	Similar to that in vasa def.	Numerous animalcules in active motion	6 and 48
17	31	Fluid thick at fundus, in the interior fluid	Globules and fragments	27
5	32	Fluid opaque, purulent	Cream or purulent appear-	16
19	30	Mucilaginous; animalcules	Cream-like globules	22
8	32	Purulent; animalcules abundant	Few animalcules	32
9	33	Small in quantity, brown, opaque	Dilute, purulent — animal- cules few	15
12	33	Small in quantity; no ani- malcules	Small particles; large glo- bules	26
16	33	Globules; no animalcules	Minute globules; no ani- malcules	6 and 36
6	39	Showed no animalcules; no globules	Purely purulent, with glo- bules; no animalcules	2
3	3 9	Gelatinous; no animalcules or globules	Of a cream or purulent co- lour; no animalcules	6
20	41	Mucilaginous; many ani-	Particles, but no animalcules	38 and 58
7	42	Slightly opaque; abundant animalcules	A few animalcules	37
18	49	Animalcules abundant, dead in seventeen hours	Abundant animalcules, lively ten hours	10 and 17
2	57	Abundant vestiges of ani- malcules; few distinct	Purulent; animalcules abundant, dead	5

From the above table it appears that the spermatozoa, or spermatic animalcules were found equally in the vesiculæ seminales and in the vasa. It is curious to remark that, in all the cases in which spermatozoa were found in the vasa deferentia, similar animalcules were noticed in the vesiculæ seminales. In cases in which the body was examined a few hours after death the spermatozoa were found alive, and moving actively, while in a few hours later they were motionless and dead, and warmth had no effect in reanimating them. In some cases the animalcules were not perfect, portions only of imperfect spermatozoa being found. In other cases no animalcules could be discovered either in the vasa deferentia or vesiculæ; they were replaced by large or minute globules, small particles, or fragments.

The age of the individual appeared to have little to do with this condition of the spermatozoa, or indeed with their presence, numbers, or total absence. It is curious further to remark that, although spermatozoa were found frequently in the vesiculæ and vasa deferentia, they were only found twice in the testes. The fluid expressed from the testes was transparent, generally contained globules nearly equal in diameter to the blood-corpuscles, and invariably contained dense particles, apparently spherical, from ten to fifteen times smaller.

"Dr Davy thinks, first, that chronic wasting diseases terminating in death arrest the secretion of the testes, or the production of those animalcules on which there is much reason to believe the active powers of the semen depend. Secondly, that the contents of the vesiculæ and vasa deferentia, under the influence of disease, retain their characteristic qualities longer than the contents of the tubuli; and, thirdly, that there is least fluid in the vesiculæ and in the vasa deferentia, and that it is most altered in instances of chronic diseases of the abdominal viscera, and especially of the intestines."—Edinburgh Med. and Surg. Jour., vol. 1, p. 14.

Dr Davy considers that, admitting that the vesiculæ are, like the gall-bladder and bladder of urine, recipients, the fact may be viewed as a fortunate circumstance in our economy, and admirably adapted to the condition of man. Like the bile or the urine, the spermatic fluid in the healthy adult appears to be in constant process of secretion, and to pass as it is formed into its appropriate reservoir, from which, without disturbance of the system, in a state of continence, it is either passed out and voided during the act of alvine evacuation, or is in part absorbed.

"Mr Hunter, in accordance with the opinion which he had formed of the use of the vesiculæ, did not admit this. He believed that the fluid rather accumulated in the testes, and gave rise there to annoyance, requiring its evacuation by a disturbing act—a dangerous doctrine, and one for which there is, in modern science, no sufficient evidence. In opposition to the doctrine of Hunter, I may further state, that I have frequently examined microscopically the fluid from the urethra, following the alvine evacuations, and I have always found it, in a healthy person, abounding in animalcules, the majority of which have always been dead; and thus, perhaps, seeming to indicate that the vesiculæ are cloacæ as well as reservoirs, and are essentially designed for man to enable him to control and to exercise that moral check on the passions by which he should be distinguished from brute animals, and without which no considerable advance can be made in civilisation or in elevation of individual condition and character."— Edin. Med. and Surg. Jour., vol. 1, p. 14.

The most obvious deduction from the foregoing inquiries is that in

the human adult the seminal fluid varies much in different subjects, at different times, and at different ages. Thus it may be more or less matured and elaborated, and it may be secreted in larger or smaller quantities. I do not think sufficient attention has been paid to these circumstances. The quality of the semen, and the consequent exhaustion of the system which secretes it, must have a great influence on the progeny. May not the fact observed in all ages, that the children of self-made men are not usually equal to their sires, depend, among other causes, upon deterioration of the impregnating fluid in the parent from the great mental demand to which he was subject at the time impregnation took place?

Observation teaches us many facts that it may be of importance to mention here. It is an old aphorism that "like begets like," and we find that not only are the features of the father reproduced in the son, but also that those of the grandfather and remoter ancestors reappear in their descendants. Often we see peculiarities and deformities, such as supplemental fingers, handed down. In these cases it is evident that it is not by association, education, imitation, or copying habits, good or bad, that the progeny are influenced. The cause is wholly external to them and beyond their control, and the simple fact is that at the time of impregnation the SEMEN influenced the mother's system so as to reproduce its like even to the most minute part, say a webbed finger. This, then, is what the semen does. Let us next consider what semen does NOT do. Mental qualities may be inherited, but they are not necessarily; on the contrary, it would appear that a clever man, who has risen by his own abilities, seldom begets a clever son. If we take the judges, the bench of bishops, the medical profession, it is curious to remark how few self-made men beget sons who distinguish themselves either in their fathers' or in other professions. great fact is there; the explanation may be various. Many whom I have conversed with admit the data, that with the exception of some judges' sons, there are few able men now alive or holding high intellectual positions who are the sons of distinguished fathers risen from the ranks.

This admitted degeneration has been attributed, by the majority of persons with whom I have talked on the subject, to the belief that easy circumstances and the competency made by the father release the son from the obligation to work hard and gain his own livelihood; the son of such a father is satisfied with his condition, and does not exert himself to the extent that an ambitious youth does who has no such paternal antecedents. This explanation may be, and is, more or less true.

I have, however, had many opportunities of examining early in life the sons of eminent men who have risen by their own unaided exertions, and my belief rather is that, the obligation to work hard early in life, incessant intellectual labour, and late marriage, have exhausted all the MENTAL ENERGY in the father's frame, so that there is none left to impart. If energy, without which no great success can be obtained, is the deficient element in the sons of successful men—who have spared no expense in the education of their sons—have had opportunities of pushing the youths on in every possible way—we explain why the sons are not poussable (to use a terse French expression). In spite of all other advantages, they are almost invariably pushed off their stools by youths beneath them, whose fathers if they have not had money, position, and social considerations, have had this important element, energy, to hand down to them.

It has been often said that it is to the mother that the able man owes his success; popular opinion leans to this opinion, and numerous cases may be cited in corroboration of this view; but I leave it for others to consider my view, that, given an able mother, the constant nervous expenditure of an active and energetic father's life will often fail in enabling him to pass on to his offspring his own vital energy—this must come from some unused and abundant source.

May not many of the weedy horses met with be the result of an exhausted and overworked sexual system in the travelling stallions, their sires? We may assume generally that to obtain perfect and fertile semen some rest must follow each sexual effort.

To effect impregnation certainly, and for the semen to be not only fertile but capable of producing healthy and perfect offspring, it is indispensable that it should remain and be matured in the vesiculæ seminales; in favour of which use of these organs we may quote the authority of Kölliker, who says—"In common with many other observers, I have so frequently seen spermatic filaments in the vesiculæ

1 I have attempted to procure evidence on this subject, particularly with regard to the breeding of horses. The difficulties are naturally great. Owners of stallions are loth to believe that weeds can depend upon this cause. When a celebrated horse can fill his list of forty-five mares, at thirty-five guineas a mare, I fear the pecuniary consideration will make the owner blind to the supposition that his horse's powers may become exhausted. If, however, the owners of the stallion cannot see the question in this point of view, it is time for those breeders who own valuable mares to be put in possession of the information that their disappointment probably depends upon the sires they choose being over-taxed. It is the object of all owners of race-horses to get their mares served as early in the season as possible, so that the mare may drop her foal as soon after January as possible. A two-year-old born in January is better able to compete with his compeers than one foaled in March; at this age, a couple of months tell. As a consequence, the stallion, if a celebrated sire, is called upon to serve in a short time a large number of mares. Now supposing forty-five mares, each to be mounted once, at least, and several every nine days until stinted, it is hardly conceivable but that the quality of semen emitted by the horse should deteriorate after so enormous an expenditure of the vital fluid.

seminales, that I should describe their occurrence there as normal, and assign a double function to the seminal vesicles; viz., its principal one, of affording a special secretion, and also that of acting as seminal reservoirs." (Loc. cit., p. 232.)

Infecundity, however, does not depend wholly on the male. In many instances no doubt can exist that the fault is with the *female*. The most common female cause of sterility is, as we might almost have expected, obstruction of some portion of the generative canal, arising from various causes.

Perfect occlusion of the os uteri may occur as a consequence of disease. Again, we meet with it only partially blocked up, from the canal being so devious that, though the menstrual secretion may be able to pass out, the semen cannot find admittance—at least in time to impregnate. Or, again, the os may be temporarily closed by a tenaceous glairy mucus, and until this is removed and prevented from again accumulating, impregnation cannot take place. (See Plate II, fig. 2, in my work on the diseases of the generative organs.)

It is not my intention here to speak of all the causes of sterility in the female. Those desirous of learning more on this subject must consult my larger work on the urinary and generative organs. It must not, however, be supposed that mere mechanical obstruction is the only cause of sterility in the female. Many others, effectual beyond a doubt, but very mysterious in their origin, undoubtedly exist.¹

In considering the subject of sterility, it should not be forgotten that idiosyncrasies exist in all animals. A male and female may be perfectly potent and fertile, and yet be unable to breed together. In fact, the semen of one male, from some hidden cause, will not impregnate a particular female, though it will others. A similar phenomenon occurs also in the vegetable world.

In Mr Darwin's book on the 'Origin of Species,' there are some curious experiments mentioned bearing on this question. "Thus one tree will not take (be grafted) on another, apparently from differences in their rate of growth—in the hardness of the wood—in the period of the flow—or nature of their sap. On the contrary, great diversity in these very particulars, and even in more important ones, are not infallible tests. One may be woody and the other herbaceous—one

¹ Donné has shown that the mucus coming from the os uteri is alkaline, so alkaline sometimes, that in one of his experiments the contact of apparently healthy uterine secretion, in a few seconds, killed several hundred spermatozoa. Blood, it seems, does not kill the spermatozoa, but urine does, although not very rapidly. (See 'Cours de Microscopie par Donné,' pp. 295, 298.) Leucorrhœa, or "whites," will at once destroy the spermatozoa, and as large numbers of women suffer under these disorders, we cannot be surprised at finding such women barren.

evergreen and the other deciduous—one the native of a hot climate, the other of a cold one—and the grafts from one on the other may succeed. The pear can be grafted far more readily on the quince, which is ranked as a distinct genus, than on the apple, which is a member of the same genus. Even different varieties of the pear take with different degrees of facility on the quince; so do different varieties of the apricot and peach on certain varieties of the plum." (Loc. cit., p. 264.)

"Sterility may be produced by the attempt to cross between very different races. An embryo may be developed to a considerable extent, but the mother's system never recovers the disturbance caused by the attempt to unite two organizations so widely unlike. This often happens, according to Mr Hewitt, in attempts to cross among gallinaceous birds." (P. 264.)

That one horse will fail to impregnate a mare, while she will prove in foal by another, is well known to breeders. During the season of 1864, I sent a mare several times to be served by a particular horse, but without success, while, on being put to another, she was immediately impregnated. I observed the same in the case of a very celebrated high-bred short-horned bull, in my own neighbourhood, which, although he mounted cows, did not impregnate them. These and other anomalies deserve the consideration and close observation of all breeders of valuable stock.

FECUNDITY LESSENED.—Greg, p. 84, hints at the existence of certain physiological and occult causes which affect the fertility of animals, especially when in what we may term for them a state of civilisation. One such influence may be specified with considerable confidence, namely, "THE TENDENCY of CEREBRAL DEVELOPMENT TO LESSEN FECUNDITY." (See notes on p. 87, from H. Spencer, in 'Enigmas of Life.')

SECT. II.—UNGRATIFIED SEXUAL EXCITEMENT

Just in proportion to the degree of uneasiness caused by the presence of an excess of semen in the organs, is the relief experienced after its natural, or, so to speak, legitimate emission. As will be shortly stated, regular and moderate sexual intercourse, at the adult age, is undoubtedly of advantage to the system at large. But the mere excitement of the sexual feelings when not followed by the result which it should produce, is, as has also already been stated (p. 19), an unmitigated evil. I am becoming every day more and more convinced that much suffering and many ailments arise in great measure

from the repeated and long-continued excitement of the sexual feelings unattended by subsequent sexual relations. I could mention many instances where I have traced serious affections and very great suffering to this cause.

The cases may occur at any period of life. We meet with them frequently among such as are usually called or think themselves continent young men. There are large classes of persons who seem to consider that they may, without moral guilt, excite their own feelings or those of others by loose or libidinous conversation in society, provided such impure thoughts or acts are not followed by masturbation or fornication. I have almost daily to tell such persons that physically and in a sanitary point of view they are ruining their constitutions. There are young men who almost pass their lives in making casual acquaintances in the streets, but just stop short of seduction; there are others who haunt the lower class of places of public amusement for the purpose of sexual excitement and live, in fact, a thoroughly immoral life in all respects except absolutely going home with prostitutes. When these men come to me labouring under the various forms of sexual debility, they are surprised at my suggesting to them the possibility of the impairment of their powers being dependent upon these vicious habits.

Parents and guardians should warn young men against idling away their spare time in such detrimental amusements. There would often be less inducement for them thus to demean themselves were greater pains taken to render their homes agreeable, and especially by providing that they shall learn in the domestic circle to appreciate the society of modest women.

Similar evil consequences, only in a modified way, follow long engagements, and are witnessed also in the many instances where vain worldly women trifle with serious men's affections to jilt them in the long run.

This opposition to nature's laws is not confined to single life. I almost daily witness such ill consequences as the following very painful case, in which the patient's wife—to whom he is passionately attached—is the real cause of serious illness in her husband, by obdurately refusing to allow marital intercourse, for fear of having any more children (she has perhaps had several), although she otherwise keeps up the semblance of familiarity and affection, and thus adds very greatly to his suffering.

Few medical men venture to suggest such a cause for the general ill health and sexual debility they meet with, but I am sure such cases are not unfrequent; and where the excitement is allowed to continue, all the remedies of the Pharmacopæia will avail nothing, and in the more severe cases, I fear that even subsequent abstinence from all

causes of excitement will not ensure a cure. I have every reason to believe that if the co-ordinate performance of what constitutes the sexual act be repeatedly disturbed, the best medical treatment is not always efficacious in restoring sexual power.

These ailments, I repeat, are not confined to the young. There are old men who marry young wives, and who pay the penalty by becoming martyrs to paralysis, softening of the brain, and drivelling idiocy. Such unions as these, although not always recognised, are certain sooner or later to do mischief. I am daily made cognisant that many cases of the most intractable forms of impotence and abeyance of virility I have to treat arise from similar causes. In the first place, these indulgences—which are thought so harmless—produce local mischief in the reproductive organs. Among the principal and primary evils they cause, is the weakening of that co-ordinate action which should connect the excitement of the organs and the complete performance of the sexual act. In the next stage, the excited nervous system, if it does not receive and reciprocate that shock which we have seen ought to attend ejaculation, suffers a longer and more severe strain, lasting often days or nights, and this new explosion of the Leyden jar is repeated over and over again. In fact, the non-occurrence of emission after sexual excitement permits for a time the repetition of the excitement; but ultimately a collapse takes place from which it is very difficult to rally a patient. The consequences are, that when after the preliminary excitement has occurred, and the control of the will shall have been able to prevent emission, the patient will very probably find that when he wishes it. emission will not follow erection. These practices, unnatural in the highest degree, cannot be carried on with impunity. Nature is sure, sooner or later, to inflict a severe retaliation.

Under the head of impotence I have described several other instances of this detrimental action on the reproductive powers. I have more especially alluded to the case of an artist who had so schooled his will that he could look at the nude figure without excitement, yet when the time came for his marriage he felt himself unequal to the task.

I cannot bring to a close this important chapter without directing the attention of the profession to the dangers that married couples incur in defrauding nature by practices that have been called CONJUGAL ONANISM, and a M. Bergeret has in a French work entitled 'Des Fraudes dans l'accomplissement des fonctions generatrices,' given a very succinct account of how it is that French parents determine (and carry out) that they shall only have one, or at most two children. M. Bergeret mentions that this method of limiting the family is not confined to the poor; the system also holds good among the upper

classes in France. In a discussion which took place a few years ago in the French Academy of Medicine, it was publicly admitted that the arrest in the progressive augmentation of the population in France did virtually depend upon the means the nation took to check its increase by fraudes génésiques.

I am far from attributing, with the author of this treatise, so many of the local ill consequences which he traces in the female to the means pursued. On the contrary, I am fully convinced that the many ailments, such as simple affections of the uterus, which M. Bergeret considers to follow the practices adopted in France, attend—although, perhaps, in a less degree—married life in England, where, I am convinced, the practices are hardly known, and still less frequently resorted to. Still I raise a warning voice against either married or unmarried persons giving themselves up to ungratified sexual excitement.

SECT. III.—SEXUAL SUFFERING IN THE MARRIED

In speaking of continence (page 17), I admitted the difficulties some young men experience in maintaining it, and I furnished some important evidence proving that a strong will, plenty of exercise, and surgical supervision, should enable a man to control his sexual appetites. In the present section I propose devoting a few pages to sexual suffering in the married—a subject which has not met with that consideration from medical men which it deserves.

It often occurs that married men come to me with sad complaints of the intense suffering they have to undergo. I saw one such patient who was a man of strong sexual disposition, married, and the father of several children. In consequence of the rapidity with which his wife (a delicate woman) had brought him a family, she had been suffering severely from uterine disease, for which she was then under treatment, and the medical attendant had recommended separate beds and abstinence from all sexual relations. This patient assures me that no one could imagine what torments he has undergone; warmly attached as he is to a loving, educated, and beautiful wife, yet debarred from all the most cherished advantages of a married man. "What could I recommend?" was his inquiry.

Let me cite another instance. Such a man as the above came to me with a budget of grievances. Married to a woman of strong animal instincts, she had proved unfaithful to him, and an action for divorce was about being brought by my patient against the lady. En attendant my married patient was the subject of most acute sexual suffering, without any immediate chance of becoming legally separated from a

woman who, although his wife, had ceased to be a wife to him; yet society had decreed that he must bear his hard lot, without any chance of being speedily released from the most acute sexual suffering. Moving in the best and most fashionable society, much admired by ladies of his acquaintance, he assured me that no one could form any idea of the sufferings or temptations he had hourly to undergo; yet he was chained to this torment, and his every action watched by the most vigilant detective police that the friends of the wife could call to their aid.

I regret to say that in such cases as these, I can do little more than offer my sympathy; still, to persons who are thus situated my remarks on continence are of value; and as a surgeon, I have no hesitation in saying that a man of strong sexual disposition must make many sacrifices. He must eschew much agreeable female society, he should abstain from the indulgences of the table, and he must take more exercise than the indolent are disposed to adopt. The profession can offer him little assistance and but little benefit, unless he be endowed with a strong will—an aid to treatment, often found wanting in strongly-developed animal natures. Is it surprising, then, that so many who, under more favorable auspices, would have continued to make the best of husbands, fall victims to a vicious mode of living, and seek in fornication some alleviation of their sexual sufferings?

These are some of the arcana of social life that are revealed only to medical men, in the hope (often a vain hope) that they may be in a position to suggest some mode of relief.

During the last few years, and since the rights of women have been so much insisted upon, and practically carried out by the "strongestminded of the sex," numerous husbands have complained to me of the hardships under which they suffer by being married to women who regard themselves as martyrs when called upon to fulfil the duties of wives. This spirit of insubordination has become more intolerable as the husbands assert—since it has been backed by the opinions of John Stuart Mill, who in his work on the 'Subjection of Women,' would induce the sex to believe that they are "but personal bodyservants of a despot." Mr Mill complains that the wife has not even the privilege of the female slave, who he states "has (in Christian countries) an admitted right and is considered under a moral obligation to refuse to her master the last familiarity. Not so the wife, however brutal a tyrant she may be chained to—though she may know that he hates her—though it may be his daily pleasure to torture her, and though she may feel it impossible not to loathe him—he can claim from her and enforce the lowest degradation of a human being, that of being made the instrument of an animal function contrary to her inclinations."

As opposed to these doctrines, I would rather urge the sex to follow the example of those bright, cheerful, and happily constituted women, who, instead of exaggerating their supposed grievances, instinctively, as it were, become the soothers of man's woes, their greatest gratification apparently being to minister to his pleasures, seeing that woman was created for the purpose of being a help-meet to her husband. Doubtless many a medical man can, like myself, recal the self-condemnation of more than one married woman who, in her repentant moments, has acknowledged that want of sympathy and affection on her part has led first to estrangement and subsequently to a permanent separation from a husband whose merits she has learnt too late to appreciate.

SECT. IV.—DISAPPOINTMENT IN LOVE

Disappointment in love or misplaced affections are frequently attended with most painful sexual consequences, even among men who are not usually thought very susceptible. In October, 1861, I attended a patient who came to me complaining that his health was breaking down, owing (as his medical attendant had told him) to loss of semen. It appeared that, originally of a good constitution, and having by strenuous exertion attained a position of some eminence, he had thought of marrying. Owing to circumstances of the exact nature of which I did not care to be informed, but for which he assured me he was not to blame, two or three serious engagements were successively formed and broken off. The last had come to an end on account of some difficulty on the important point of settlements. The young people, however, had been thrown frequently in one another's way; and notwithstanding I urged my patient not to expose himself to any sexual excitement, he assured me there were professional reasons which rendered it impossible that he could absent himself from the companionship of the lady. His condition when I saw him was very sad. He seemed to have had originally a healthy frame; but he was beginning to find his memory failing. On rising in the morning there was great languor, and a growing indisposition to transact his business. This symptom made him all the more anxious, as there was an hereditary disposition to mental affections in his family which in several instances had resulted in idiocy. I could detect no morbid nocturnal or diurnal emissions; my patient told me that, with very few exceptions, he had led a strictly continent life, and that in these isolated instances the sexual act had been well performed.

All I could do was to point out to him the dangerous position in which he was placing himself, and the necessity for him to be more careful than others, if he would preserve his health and mental faculties.

In this particular instance I did not feel justified in applying any local treatment, in the belief that nothing but a thorough change of habits was likely to relieve him. I recommended daily gymnastic exercise, with less mental labour, and entire abstinence from all sexual excitement, if marriage with the lady was impossible. As long as such excitement lasted, I told him I had no hope that physic would do him any good.

In the present day in addition to the advice given above, I should try the various preparations of potassium, remedies which are asserted to have direct effect in allying irritation of the nervous system originating in these causes. I have witnessed some instances in which benefit has been derived from these preparations. Under their use I have observed the anomalous symptoms gradually disappear and a patient restored to health, if he has the will strong enough to abstain from exposing himself to similar trials.

I believe cases similar to the one just related are much more common than is supposed, and I have selected it as a type of the ignorance shown by young men and the carelessness with which they injure their health by conduct which a very little reflection ought to convince them is dangerous in the last degree. Of course this state of ill-health may arise from other causes; but the numerous instances in which debility does undoubtedly follow from this cause serve to show that a man cannot with impunity disobey natural laws. Sexual excitement is intended to be followed by sexual gratification, and where this is not the case the pent-up feelings will pretty certainly, as I have already said, avenge themselves on both mind and body in a way equally unexpected and destructive.

SECT. V.—PASSING BLOODY SEMEN

Occasionally patients not only complain of emission taking place at unusual times, but state that the semen is coloured red. I have very recently had such a case under my care. It occurred in a married man about fifty, who, so far as I could learn, had committed no excesses: he was surprised one night by an emission—to which he had not been previously subject—and, to his further astonishment, observed that his night shirt was stained with blood. As soon as he could dress he came to consult me; I could find nothing unusual in his urine, nor could I discover any lesion in the canal. Although this patient was under my care for some days subsequently, no recurrence either of the bloody discharge or the emission took place. In other instances that have come under my notice, I am inclined to think that some mechanical injury must have happened to the penis during sleep, so as slightly to

rupture the lining membrane. At any rate I doubted in this particular instance whether the blood was in any way mixed with the semen, except at the very moment of ejaculation.

Since my attention has been called to the subject, I have not been consulted by any one immediately after semen tinged with blood has been passed, but every now and then patients say that they have passed bloody semen when connection has been often repeated. In books, allusion is made to the subject, and the occurrence of bloody semen is said to follow frequent masturbation: it may be so, but I have had no opportunity as yet of minutely examining the symptoms of any such case.

The case of an elderly gentleman is subsequently mentioned, who passed bloody semen in consequence of ungratified sexual excitement. In this as in all the other cases that have come under my notice, however, the patient did well, and no ill consequences ultimately resulted.

The treatment I have followed has always been the administration of opiates and alkalies, with rest and abstinence from stimulating fluids. I need not say that indulgence in thought or deed as regards sexual excitement should be strictly prohibited for at least a week after noticing this (to the patient) alarming symptom.

SECT. VI.—SPERMATORRHŒA

It often happens in medicine, as in other sciences, that premature generalisations draw in their train their own destruction. When, for instance, a name has been coined as designating a specific form of disease, on the authority derived merely from a few ill-observed instances of some morbid affection, in which an individual symptom has been exaggerated, no very long period of time elapses before the profession, failing to discover in its experience sufficient confirmations of the assumption, not only rejects the name but denies the individuality of the disease which it signifies, and even the facts narrated. Such a reaction is natural and scientifically remedial. It is to the interested exaggeration by quack writers (professional as well as extraprofessional) of the symptoms of spermatorrhea that we must, I imagine, attribute the fact of medical men of eminence having denied that such a disease exists at all. Great exaggeration has doubtless been indulged in by many of those who have described the complaint, and this from obvious and infamous motives; but I am convinced, as I have already stated, that many of the most obstinate as well as obscure complaints which the medical man meets with arise from the repeated loss of semen, and I am no less certain that such complaints as hypochondriasis, the various forms of indigestion, debility, and nervous depression, with loss of sleep, are often only the effects of spermatorrhoea. In such cases the best, and indeed the only treatment, is that which removes the *cause*, and is not confined to combating the symptoms. The best evidence of this cause and effect is, that such radical treatment alone relieves the symptoms when all other remedies have failed.

The condition or ailment which we here characterise as Spermatorrhæa, then, as we shall use the word, is a state of enervation produced, at least primarily, by the loss of semen. The term, I admit, has many objections, but its present general acceptance would render the alteration or employment of any substitute inconvenient. The disease, however, has received many other titles. No doubt can exist that the series of symptoms—to be hereafter spoken of—were well known to Hippocrates, for example, describes it thus: "Tabes the ancients. dorsalis proceeds from the spinal cord, it is frequently met with among newly married people and libertines. There is no fever, the appetite is preserved, but the body falls away. If you interrogate the patients, they will tell you that they feel as if ants were crawling down along the spine. In making water or going to stool, they pass much semen. If they have connection the congress is fruitless; they lose semen in bed, whether they are troubled with lascivious dreams or not—they lose it on horseback or in walking. To epitomise, they find their breathing become difficult, they fall into a state of feebleness, and suffer from weight in the head and a singing in the ears. If in this condition they become attacked with a strong fever, they die with cold extremities."

In a great number of individuals, both young and adult, an enervated state of body exists, which the profession, as well as patients when attacked with marked loss of semen, characterise by the somewhat vague term Spermatorrhea, a complaint which, as I shall now attempt to show, is as peculiar and as certainly to be distinguished by its own symptoms as fever, or any other general disease. Many a man has believed himself to be labouring under this affection when, in fact, entirely free from it. This is the case with various other diseases. There is, however, as regards this particular ailment, an additional reason for the existence of much hypochondriacal fancy about it. From the painful stigma which its existence is imagined to cast on the past life of the patient, and the secrecy consequently desired, as well as from the ease with which indications absolutely harmless may be confounded—by the inexperienced—with symptoms of this disorder, it has always been freely employed by unprincipled quacks as a means of imposition. Every disease or fancied ailment which their unfortunate victim can be persuaded into believing to be Spermatorrhea, is called Spermatorrhea forthwith; and in his agony of terror and humiliation, the wretched and often innocent patient becomes a ready subject for the wickedest cruelty, and, I need hardly add, the most exorbitant extortion. With some faint hope of partially counteracting this great evil, I have appended to this section a chapter on False Spermatorrhea (p. 171).

Perhaps a knowledge of the truth may save some reader from the perils to which his ignorance, judiciously played on by an unscrupulous quack, would leave him exposed. I earnestly recommend persons suffering in this way to seek the advice of their usual medical attendant, from whom they are certain to obtain sympathy, and who, if dealt with frankly, is competent to afford them the advice they need.

CAUSES OF SPERMATORRHEA.—Hard study I have already mentioned more than once as predisposing to this condition. The following is a sample of the cases to be met with in which over-exertion of the brain has had this effect. A patient called on me in June, 1860, complaining that he was labouring under spermatorrhœa. He stated that he had recently been studying hard at the University, and admitted also having had connection about four times in a month, without feeling any great desire, and without experiencing any great pleasure; erection and emission had, however, taken place. I found he was engaged, but from pecuniary circumstances the marriage was postponed. He complained of nearly all the symptoms which constitute spermatorrhea, and was naturally alarmed at his state; this I could and did assure him was temporary. After contrasting the conditions of the continent and incontinent man, I think I succeeded in convincing him that the only danger he had to dread arose from continuing venereal excess; that, if he remained continent, the temporary result of vigorous mental exertion would pass away, leaving him none the worse; but that the double strain on both the brain and the generative system—against which nature herself appeared to take this means of appealing—would most certainly deteriorate if not ruin both.

I have become more and more convinced of the large proportion of students in all professions who suffer in a similar manner. My usual advice to them, in addition to maintaining strict continence, is to continue their studies, but by no means to neglect regular bodily exercise. Benefit also is derived by abstaining from the use of coffee, tea, and tobacco, and the too frequent use of meat, or heavy meals, or late suppers.

In the more nervous cases the occasional passage of a bougie will dull the acute sensibility too often present in these sufferers, and give the patient that control of the will that is most desirable in such afflicting cases.

Masturbation and Venereal Excesses.—That these are the chief causes

of spermatorrhea appears sufficiently from the former part of this work, to which I refer the reader for the description of both, and their effects, as well as to the chapter on Marital Excesses. (P. 191.)

Nevertheless, a large proportion of cases of spermatorrhea depend upon other causes; and I desire particularly to dwell upon this fact, and to obtain its recognition, inasmuch as the complaint is not always a self-inflicted one, and when this is the case the stigma attaching to it may be undeserved.

Nervous affections are often the cause of spermatorrhea; still I am not prepared to say that these nervous affections themselves may not be consequences of previous masturbation or venereal excesses. It is very difficult in some instances, and especially in the later stages, to determine what relation they bear to the spermatorrhea, as in the following instance.

In September, 1859, a tall, cadaverous, worn-looking man, called on me complaining of pain in the head, disordered digestion, impaired intellect, loss of memory, uncertain gait, difficulty of progression, and uncertainty in putting his foot forward. His history was that of many others related in these pages; early excesses, mental distress in consequence—feeble resolves, followed by miserable failures and bitter repentance. Whether his present condition really arose altogether from these causes or from what is vaguely called a nervous affection—chiefly because no cause can be assigned to it—I could not for some time determine. One or two indications which pointed to local irritation of the generative organs still existing, decided me to try the treatment appropriate to a case of undoubted spermatorrhea. The result proved that my surmise was right, and the nervous affections disappeared with the treatment of the local symptoms.

Other cases, however, exist which are clearly traceable to nervous affections of hereditary origin. I have for years attended a young man who has suffered, off and on, from some of the most severe symptoms of this malady. He tells me his mother has been a martyr to nervous affections, and his family all more or less labour under various hysterical and nervous disorders. In the male these functional disturbances often assume the form of spermatorrhæa in cases where I am persuaded no vicious habits have been practised. I am not so sure, however, that in married life sexual excesses have not aggravated the symptoms, as reference to the chapter on Marital Excesses (p. 191) will conclusively show.

Nocturnal emissions, as they induce loss of semen, act as a very frequent exciting cause of spermatorrhea. (P. 110.)

Marital excesses act exactly in the same way. I need not here dwell upon a subject to which I recur hereafter further than to point out that excessive loss of semen from whatever cause will produce the very effects

which are usually classed under the general term of spermatorrhæa and its consequences.

SYMPTOMS.—True spermatorrhea, as has been stated, consists not in any one particular symptom, but rather in a train of symptoms which make up the affection. One or two of these, however, are so prominent, and yet are such fertile sources of error, that it may be as well to mention them separately. And first,

Loss of semen.—A patient will come to his medical adviser, stating that he is constantly losing semen, either by day or night, or both. This may be true, and, if true, is a serious thing, but alone it does not constitute spermatorrhea. In nine cases out of ten, however, the statement is much exaggerated, or only very partially true. The first duty of the surgeon, therefore, is to ascertain the nature of the fluid passed. If the patient make water in a test-tube, and the water is allowed to stand and cool, various deposits may be thrown down, any of which are sufficient to account for his alarm, but none of which need necessarily arise from the presence of semen in the water, thus:—

The urine when first passed may be milky or slightly turbid. This, as I shall presently show, depends upon a deposit of phosphates, which although a symptom to be attended to and requiring medical interference, depends in no way on semen in the urine, as the addition of nitric acid will at once clear the urine.

In other instances, small floating atoms or flocculi may be seen suspended in the liquid passed, and which the patient will point to as, in his opinion, presenting undoubted proofs of the affection. These the medical man will be enabled to tell him are nothing but epithelial scales thrown off by the mucous membrane, and are a sign of gleet, which, of course, should be treated; but, happily, spermatorrhæa is not the affection the patient suffers from.

The suspension of mucus in the urine as it cools will often be pointed out as semen. This—depending upon some slight irritation of the bladder—may be easily distinguished by the medical man from semen.

Again, after the urine has stood some little time, a white flocculent matter may be observed deposited at the bottom of the test-tube or suspended in the lower half of the fluid. Instead of becoming white this deposit may be of a brick-red colour. The patient may be assured that these deposits are the urates or lithates depending upon indigestion, and present one of the means by which the system gets rid of superfluous nourishment.

Long streamers or cottony-looking flocculi are now recognised as coming from the prostate or the vesiculæ seminales; the masses of mucus, of all kinds of secretions and the vermicelli-like threads are only broken-down epithelium, or may depend upon a neglected stricture or old gleet, and are all quite independent of the testes and their secretions.

These appearances will be most evident in the morning, particularly when the night has been restless, or after breakfast, when nervous excitement has come on, or the digestion has been impaired. The test-tubes used for the purpose of examining these deposits, I may mention, should be much larger than the ordinary ones, large enough to enable the patient to make water directly into them; the urine, when cold, can be thus accurately examined.

The microscope will dissipate the fear which most of the above appearances raise.

Lastly, and most rarely, the microscope detects the presence in the urine of spermatozoa, dead or alive, but most frequently the former, as urine is fatal to them; and they are to be looked for at the bottom of the tube, where they may be seen mixed with the other secretions above alluded to.

Although this comparatively rare symptom of the constant involuntary loss of semen is one of the symptoms of true spermatorrhea, it does not by any means follow that, whenever spermatozoa are found in the urine, the patient is suffering from spermatorrhea; for as we have shown above, semen occasionally passes away habitually under certain conditions.

Non-erection or imperfect erection, in the opinion of some nervous patients, is sufficient to prove that they have spermatorrhea, and coupled with other symptoms no doubt can exist that the symptoms require careful investigation; but I must refer my readers to pages 83 and 86 for their fuller consideration.

Lallemand thus describes other local symptoms: "If excesses are carried far enough, or last long enough, the excitement augments, and the first symptoms of irritation manifest themselves. Heat in the canal commences, particularly during the act of making water, the urine is more abundant than usual, and the desire to pass it more frequent, accompanied with a tickling which is sometimes agreeable; the meatus is more injected than usual, and the intensity of pleasure is diminished."

In another place he says—"One of the earliest symptoms of spermatorrhœa consists in a diminution of pleasure during the act, even before the general health has become deranged." He continues—

"At the same time that the sensation becomes weakened, erections are less complete and prolonged; ejaculation is more rapid; it becomes, in fact, so precipitate, that intromission cannot take place. The act, in regard to its duration, is almost reduced to nothing, and the same may be said of the other phenomena; it consists of a simple excretion of semen; we should moreover add that the seminal liquor is little abun-

dant, watery, transparent, without smell, and incapable of fecundation." (Vol. i, p. 623.)

One of the worst features is when, in the words of this author,—

"Little by little, the phenomena of excitement which precede the orgasm diminish, and at last completely disappear; the emission then occurs without dreams, without erection, without pleasure, and even without any particular sensation; in fact, the patients are not aware that emission has taken place except by the stains which they observe on the linen when they awake. At the same time the seminal fluid loses by degrees its consistence, its colour, its smell, and resembles most closely mucus or prostatic fluid." (Vol. ii, p. 329.)

The same author remarks, and I quite coincide in his opinion,-

"Every exaggerated evacuation of semen is susceptible of producing similar effects on the economy, in whatever way it may have been produced." Thus masturbation, marital excesses, or licentious habits will produce one and the same effect. Morality has nothing to do with this escape, the unfavorable symptoms occur in both unmarried and married life.

Where we find the general health suffering, the disposition to intellectual employment almost lost or impaired, exercise becoming a toil, society spurned, and the company of females particularly avoided, there is strong reason to suspect something wrong with the generative organs which may possibly depend upon the excessive and habitual loss of semen. This debility and enervation, which are so frequently connected with the loss of semen, may complicate almost every affection to which the human frame is subject.

Another affection which must be noted as a consequence and complication of spermatorrhœa is

Loss of Memory.—It is an undeniable fact that in many individuals any excess in sexual indulgence, or even a nocturnal emission, will be followed the next day by a temporary loss of memory. In a few days the memory will again improve, and many facts or duties which have been altogether lost, can be recalled with the usual rapidity. In other instances the loss of memory is gradual. Patients tell you that at one period of their life their recollection was excellent. As excesses were committed or frequent emissions occurred, they remarked that their memory gradually got worse until it was quite lost. This has been so often repeated to me on the most conclusive evidence that there can be no doubt as to the relation of loss of memory and sexual excesses.

The reader will remember (p. 56) that among other symptoms loss of memory was a prominent one in the case of Jean Jacques Rousseau.

I have every reason to think another affection not usually attributed to loss of semen depends upon spermatorrhœa in many instances; I allude to what is usually but vaguely called—

Clergyman's Throat.—The voice, as every one must have noticed, changes in most young men about the time of puberty. This change is evidently connected in some way with the development of the generative functions, as castration to a great extent prevents its occurring, and produces that kind of voice known as falsetto. Not only non-development, but repeated loss of semen and abuse of the sexual organs, have a perceptible effect in some cases upon the timbre of the voice.

It has not, however, until quite lately, been noticed how closely those affections of the throat, so commonly met with in young and continent men, and known generally under the term clergyman's throat, are connected with disorders or disturbances of the sexual organs.

That sexual intercourse has the singular effect of producing dryness of the throat has long been known. Masturbation often repeated, or profuse nocturnal emissions, have the same effect; and in process of time this symptom, which at first is only temporary, may become permanent. Of course the throat affection may arise from many other causes, but I have seen it so frequently associated with excesses which have debilitated the reproductive organs, that little doubt exists in my own mind that in the majority it is the consequence more or less direct of those excesses, and not merely a casually contemporaneous affection. That this must be so is proved, moreover, by finding the throat-symptom often cured by the treatment adopted to relieve the generative ailments, though they have resisted all other remedies. When the fons et origo mali has been reached, the hoarseness disappears under appropriate treatment with great rapidity.

The following are notes taken down and sent to me by a young clergyman who was a sufferer from the complaint, and had derived no benefit from any treatment of the specific affection till the sexual local symptoms had been overcome:

"When I began the practice of masturbation, at the age of 16, I was in the habit of exercising my voice regularly. The first part in which I felt the bad effects of that habit was in the organs of articulation. After the act, the voice wanted tone, and there was a disagreeable feeling about the throat which made speaking a source of no pleasure to me as it had been. By-and-bye, it became painful to speak after the act. This arose from a feeling as if a morbid matter was being secreted in the throat, so acrid that it sent tears to the eyes when speaking, and would have taken away the breath if not swallowed. This, however, passed away in a day or two after the act. In the course of years, when involuntary emissions began to impair the constitution, this symptom became permanent. The throat always feels very delicate, and there is often such irritability in it, along with this feeling of the secretion of morbid matter, as to make it impossible to speak without swallowing at every second or third word. This is felt even in conversation, and there is a great disinclination to attempt to speak at all. In many instances, in which the throat has been supposed to give way

from other causes, I have known this to be the real one. May it not be that the general irritation always produced by the habit referred to, shows itself also in this organ, and more fully in those who are required habitually to exercise it?"

Another case, of a different kind, may be interesting. A boy, fifteen years of age, was sent to me by a medical man in the country for an opinion as to his general state of health. He was small in stature, pale in face, with large ears, and prominent, thick lips. I noticed that he spoke thickly, and was very dull of comprehension. His health, I was told, had been failing for some time, and had not benefited under the ordinary treatment. The throat was painful, the tonsils swollen, the articulation thick, and the words uttered with evident difficulty. The expression of his features irresistibly suggested vice and early sensuality.

On inquiry I found that this youth had been taken from school, as he made no progress and had been petted at home. In reply to some searching questions, I learnt from the boy that he had masturbated himself at school three or four times a week for a long time; that the affection of the throat then became a prominent symptom, and that the condition of the throat was but one of a series of symptoms, all of which I had no difficulty in referring at once to the excesses of which he had been guilty. I may add that, under proper treatment, this unpromising case recovered, and the youth became able to pursue his studies with advantage, and used in his holidays to ride well across country.

Irritation of the Genital Organs and Scrotum.—A not less serious and distressing consequence of masturbation is the local irritation caused by it. A case which came under my notice in 1862, may serve as an example. Similar ones are by no means uncommon.

wished me to see a case of his, a tutor in a family, who had been for eighteen months suffering severely, and whose symptoms had resisted all remedies. On examination, I found the testes large and somewhat pendulous. There were no external symptoms of mischief to be observed, yet the patient complained of all sorts of uneasy sensations, weight, pain, and such severe irritation of all the genital organs as to keep him awake during the greater part of the night, and to render his life a burden to him. I examined his urine, which was normal; I passed an instrument (bulbed bougie) and could detect no particular local irritation of the urethra. The patient, however, acknowledged that he thought his ailments might depend upon masturbation, which he had practised formerly, and even now he had not entirely abandoned, the desire being occasionally so strong as to amount almost to a sort of satyriasis. He had never had connection or even attempted it. He was a freshly coloured man with somewhat sunken eyes. One of his most distressing symptoms was frequent and painful erection, and I advised cauterization as the best treatment under the circumstances.

THE PROGNOSIS OF SPERMATORRHEA.—We may usually give a very favorable opinion, in case of spermatorrhea, as to the prospect of a cure if the surgeon be consulted in the early stages of the complaint. Unfortunately ignorance on his part regarding the nature of the affection, general stimulants prescribed by some medical man, and his own false delicacy, often cause much delay and anxiety to the patient.

But, however confident we may be in giving a favorable prognosis relative to the disappearance of special and local symptoms in the slighter cases of spermatorrhoea, we must be somewhat cautious, when the nervous system has been once impaired, in promising perfect and speedy restoration of the natural sensations or feelings, or more than a very partial return to the buoyant state of health the patient previously enjoyed. We can guarantee, even in severe cases, a comfortable state of existence, but the patient must not expect his countenance will at once lose its haggard expression, or that his broken health will be immediately restored. His nervous system has received a shock from which it takes time to recover. Travel, amusing and intellectual employment, with cheerful society and the comforts of life which easy pecuniary circumstances give, do certainly sometimes effect greater cures than I at first had even dared to prognosticate.

DIAGNOSIS.—The diagnosis of these affections is easy enough when all the symptoms are present, and daily or nightly discharges of semen take place. It is not of such cases I am about to speak.

Most practical surgeons now acknowledge the complaint Spermatorrhea to consist in the constitutional results of disorders of the reproductive system. Many a surgeon who a few years ago would have denied the relation of the two affections, now admits that diseases of the reproductive organs do produce constitutional affections. Their complication, however, with many nervous symptoms, causes functional diseases of the sexual organs to be confounded with the various affections of the brain by which they are not uncommonly attended. It is impossible in this place to enter into a disquisition on the various shades of difference; my own belief is, that many cases of imbecility, insanity, and epileptic affections may be traced to previous abuses of the generative functions; still I am equally persuaded that affections of the brain and spinal cord can hardly run through their course without implicating the sexual apparatus, so intimately are the two related. Abuse of the sexual feeling has often been the cause which has first produced the head symptoms, and it unfortunately too often happens that the primary cause of the complaint is ignored, while the subsequent symptoms are treated as if the brain had been primarily affected.

Modern psychologists are, however, more closely examining this subject, and many of the most enlightened physicians of our existing lunatic asylums recognise the dependence of insanity on derangements in the sexual functions, and direct their treatment accordingly. (See p. 67.)

If, then, the diagnosis between these affections of the sexual organs and the general diseases now admitted to depend upon the nervous system, may be difficult and ill understood, even in the present day, from a disinclination on the part of some persons to attribute the affection to the right cause, the same difficulty cannot impede the diagnosis of the purely local sexual lesions.

I have already pointed out (p. 149) the great error it would be for a medical man to set down as seminal discharge all secretions that are to be found in the urine at the time it is passed, or which may be discovered after allowing it to stand. In these cases of difficult diagnosis the microscope and chemistry generally enable us to decide on the nature of the secretion. Three rules, however, should never be forgotten, rules which are of equal value to the nervous patient and the medical man.

1st. Spermatozoa or traces of them may always be found in a seminal discharge. To discover the presence of spermatozoa we should desire the patient, as I have already said, to micturate into a long and narrow tube capable of containing an ounce of fluid, and place it for a few minutes in a test-rack. The spermatozoa, in consequence of their greater specific gravity, will, if present, sink to the bottom of the fluid. If there is much saline matter, it may be dissolved by adding plenty of water and letting the mixture stand, when the spermatozoa will sink as before. Donné asserts that the fluid may even be boiled without destroying them. The same author states that he has discovered spermatozoa in urine several days after it has been passed (loc. cit., p. 315.)

2nd. The presence of spermatozoa in urine does not conclusively prove the existence of spermatorrhoa, or even of constant seminal discharge. The effort of difficult micturition, or defecation, the fact of the patient having lately had connection, or even of his having undergone sexual excitement, is enough to account for the first subsequent emission of urine containing spermatozoa. A small quantity of semen may have been left in the urethra and pass away with the first stream. It is not then the occasional presence of spermatozoa in the urine, but the habitual escape of semen coupled with general symptoms of debility, that constitutes the condition—Spermatorrhoa.

3rd. Spermatorrhea may really exist, though it may be impossible at first to discover spermatozoa in the urine.

I cannot allow another edition to appear without urging my profes-

sional brethren to depend less upon the discovery of spermatozoa than on the consideration of the symptoms existing at the time when these patients consult him. Thus, if a patient has that peculiar worn or haggard expression with which the surgeon is so familar, if he complains of lassitude, indisposition to work, and loss of memory, and if on cross-examination he admits evil practices in his youth, followed by mental excesses or inability to consummate marriage for want of erection, what does it matter to the surgeon whether he can or cannot detect the presence of semen in the urine? Scientific curiosity may prompt an effort to discover semen, but the chief care of the surgeon must clearly be to treat the symptoms patent to his sight. Experience tells us that this can best be done by directing the attention to restore the sexual powers, preventing any loss, and prescribing phosphorus, that being the ingredient most deficient in such a man's system.

Donné gives some interesting particulars of cases of suspected discharge of semen which he has watched for days together without finding any traces of spermatozoa. After several days, perhaps, the discharges all at once were found to contain large quantities of spermatozoa. In one case, during eighteen days the urine was most carefully examined several times a day, and yet on three occasions only could the spermatozoa be detected, and each time the patient was aware that a nocturnal emission had occurred. In other instances all the urine passed during the night may contain spermatozoa, while that passed in the daytime is found to be perfectly free from them. (Loc. cit., pp. 329—332.)

It frequently happens also that at the time of consulting the surgeon, a patient no longer passes semen, this stage of the complaint having passed by. Consequently, the closest examination fails to detect any spermatozoa in the urine, though the patient is suffering all the consequences of loss of semen, and presents all the other symptoms of Spermatorrhæa. What we have to decide is, whether the general and local symptoms (and not one symptom only) are such as indicate what we have here called Spermatorrhæa.

These simple rules and remarks should be impressed on patients, who are only too ready to fall into error on this subject, or, still worse, into the hands of quacks, and to suppose, or be persuaded, that all discharges that follow or attend micturition consist wholly or partially of semen. A very nervous patient, who had lately married, and whose wife was in the family way, came to me complaining of impaired health and of frequent emissions in passing urine, although he occasionally indulged in sexual intercourse. I desired him to make water in my presence, and he did so about two hours after breakfast. As the last glassful of urine came away, the patient called

my attention to the so-called semen, and I could scarcely be surprised at his terrors, especially as I knew he had heard and read a great deal of Spermatorrhea. A thickish fluid, in colour and consistence resembling cream, dropped into the glass, and in a few seconds fell to the bottom, the supernatant fluid being more or less transparent. The patient stated that this discharge took place only occasionally, and most frequently after breakfast, and as the subsequent effects were invariably debilitating, he felt no doubt that the secretion was really semen. I was able easily to reassure my patient, and to convince him that this creamy discharge was nothing but a deposit of phosphates, as a little acid poured into the test-tube caused the instantaneous disappearance of the so-called semen.

Pathology.—Little is known as to the local condition which gives rise to spermatorrhoea. I believe that in the earlier phases but a slight if any local change takes place, the affection being functional only.

When the practised hand of the surgeon passes an instrument, he may find an exceptional amount of sensibility. When this is present it is not surprising that emotional influence on the brain will react on the generative system, and under such influences semen be lost. Hence the treatment is to dull the sensibility of the urethra, and a cure is effected, as we shall presently see. In other instances an instrument may be passed, and the urethra will be found to have lost all its sensibility; there is an apathy of the parts to all stimulants that is very marked.

In the more advanced cases, however, we find an enormously increased sensibility. The mucous membrane is susceptible to both local and general influences in a surprising degree. This irritability leaves no traces after death, and I am not aware that any postmortem examination has ever been made which throws any light on the subject.

In some instances there is, during life, an increased redness and tenderness of the meatus, glans, or urethra, but these symptoms do not necessarily occur.

Of the Urethra.—In the advanced stages, when irritation or inflammation has existed for some time in the genito-urinary systems, or nocturnal or diurnal pollutions have been established, and pain, dysuria, or a frequent desire of passing urine occur, the surgeon will notice—when he introduces an olivary bougie, about the size of No. 8—that for the first three or four inches it passes readily enough; at this point of the instrument's progress some patients will complain of pain, and as it advances towards the bladder the more susceptible will sometimes accuse you of cutting them as if with a knife, so acute is the suffering, even when the bougie is passed by one who has a delicate

hand. When the instrument reaches the bladder, and is allowed to remain at rest for a few minutes, the pain ceases, and on withdrawing it the suffering is slight, and no blood follows; a drop or two, however, may sometimes coze out. In these cases, then, we may naturally suppose (for I have never had an opportunity of verifying my opinion on the dead subject) that we have to deal either with simply a morbid sensibility of the mucous membrane about the veru-montanum (b, vide diagram; p. 104), or else with a granular condition, similar to that observed sometimes on the inner surface of the eyelids, and occasionally in other mucous membranes, as a consequence of chronic inflammation.

Again, there may be stricture of the urethra near the veru-montanum, causing the semen to pass back into the bladder instead of forward along the urethra.

Of the Vesiculæ Seminales.—"The vesiculæ seminales," says Lallemand, "may be dilated and thickened; they may lose their characteristic irregular, uneven surface, and become firmly adherent to the surrounding structures. Their lining membrane may be covered with lymph, or granular fungoid vegetations. They may be filled with pus or tuberculous matter.

"I have almost always found in the vesiculæ seminales, particularly at the bottom of the depressions, a thick, granular, shining liquid, variable in its aspect, colour, and consistence, but resembling pretty thick glue, and more or less transparent. Under a power strong enough to observe the spermatozoa, the particles¹ (grumeaux) of this secretion appear somewhat irregular in size, more or less opaque, and of a uniform shape. These are evidently the products of the internal membrane of the vesiculæ seminales; for they are found with analogous characters in the accessory vesiculæ of the rat, &c., which never contain animalcules, and do not directly communicate with the vas deferens. These canals never contain similar bodies in any species. This secretion, then, is analogous to that produced by the prostatic follicles, Cowper's glands, &c. Its use is the same, and it deserves for many reasons our special attention." (Vol. ii, p. 398.)

In the earlier editions of this work I depended upon Lallemand for the description of these affections. Subsequent experience induces me now to believe that many of the most obstinate affections we meet with in practice depend upon previous inflammation spreading from the

1 They have been compared to grains of sago. I am inclined to think the Professor has rather exaggerated this state of things. Modern investigation has led to a different view being taken of these bodies, and comparative anatomy teaches us that the secretion of the vesiculæ seminales is very variable in consistence: in the guinea-pig it is nearly solid, and becomes softened as soon as it comes in contact with the secretions of the vagina.



urethra downwards to the vesiculæ seminales, and permanently and persistently causing those interminably obstinate discharges that patients suffer from. In most of the cases complained of-when patients, on the least exertion, pass what they call semen—especially in those instances when a thick, ropy, tenacious slime exudes in defecation or micturition, or even during sleep, probably in consequence of spasmodic action of the complex muscular contraction alluded to at page 92, the discharge comes, as I now believe, from the increased and pent-up secretion resulting from a previous inflammation of the vesiculæ seminales. When we examine the structures and extent of these organs, when we notice their relation to the surrounding parts, and the probability of their becoming inflamed when the inflammation caused by acute gonorrhea is communicated along the canal to these large mucous sacs, the surprise is, not that patients should suffer, but rather how it is that the profession has not attributed hitherto most of these chronic and obstinate cases of discharge from the urethra to illunderstood and badly treated gleet and gonorrhoa followed by inflammation of the vesiculæ seminales.

When we notice the depth at which these sacs are placed, and the difficulty in reaching them so as to apply local treatment, we must not be surprised that, in many instances, the usual methods of cure tend only to the aggravation of the complaint. This is so much the case in my opinion that, in more instances than one, where injections and specifics, such as the internal administration of copaiba, capsules, and turpentines, have been employed for months without avail, I have succeeded by leaving them all off and employing external counter-irritants on the perinæum, with other local and general means of improving the general health, in gradually re-establishing a healthy condition of the organs, and in curing a long standing malady.

In this way we obtain a key to the popular cure of interminable gleets, when a patient tells us that, having for months carefully followed his doctor's prescriptions, he at length got well by getting drunk and abstaining from every sort of local and general treatment. The cure must have been effected in such instances by leaving nature, aided by a good constitution, gradually to allay all irritation. Of the fact that gleet or the passing a considerable quantity of a thick mucilaginous fluid, more or less tinged yellow or green, will subside of itself, there can be no doubt. Whether the surgeon will accept my explanation of the case admits, perhaps, of some doubt, but I have for some years been in the habit of attributing the cause to inflammation of these sacs, and daily experience increases my confidence in the correctness of this opinion.

Spermatic Cords.—In speaking of the morbid appearances of the spermatic cords, Lallemand states—"The terminal extremities in the

urethra of one or both the spermatic cords may be affected. Instead of being circular, and forming little nipple-like projections, their orifices may present a stretched chink, large enough to admit a goose-quill, and there may be erosion of a sort of sphincter which surrounds them. Ulceration may attack the mucous membrane. The lining membrane may present a villous alveolar inflamed appearance, or it may become of a yellow colour. Instead of being the elastic free bodies they are, they may become cartilaginous or ossified, and they may have a tortuous crooked direction." (Vol. i, pp. 11, 23.)

Of late years I have had few opportunities of personally examining the spermatic cords after death. The cases I have been consulted about have fortunately not had a fatal termination, and I have had no means of corroborating Lallemand's views. Judging from the symptoms I have witnessed, I should say that the most frequent morbid conditions of these parts depend upon inflammation attacking the vasa deferentia, consequent upon affections of the testis, and terminating in a closure, temporary or permanent, of one or both canals. cases the passage of the spermatic fluid is obstructed, and when the affection is permanent, sterility may be considered as beyond the control of surgery. In these cases, however, impotence, according to our definition given subsequently, does not necessarily follow. I believe that erection without subsequent emission is quite compatible with this state of occlusion of the vasa deferentia. When only one vas deferens is obstructed, of course neither sterility nor impotence exists; for, as I have elsewhere stated, one perfect testis will be sufficient to carry on effectively the reproductive function, and it seldom happens that both testes become affected. Still, I believe that not unfrequently the vas deferens of one side is obstructed, and this gives rise to much local mischief, and in too many instances atrophy of the testis is the consequence, as there is no exit for the secreted semen except through the absorbent system.

TREATMENT.—The first consideration in dealing with any case of spermatorrhea is to ascertain from which of its many causes the affection may have more especially arisen. Each patient may complain of some particular or well-marked symptom to the exclusion of all the others, though the affection itself may consist of a lesion of more than one function. It is, therefore, of great importance that this distinction should be clearly understood. According as one or other of the functions (e.g. erection, emission, or the character of the emitted semen) is in fault, so must the treatment vary; what may be good in one case, may not be applicable in another. Having heard what particular symptom the patient complains of, he should be desired to make water into a glass, which should be deposited at once in a stand, to be examined at leisure. It is well at the same time to pass an olivary bougie,

in order to ascertain the susceptibility of the urethra—an excellent means of arriving at an accurate diagnosis of the local state of the mucous membrane. In order to cure the affection, it is of more consequence to ascertain the *immediately* inducing local cause than the *primary cause* which may have impaired the functions or originated the lesion.

Before attempting the curative treatment, the preventive one should be commenced. It should be ascertained if masturbation is still ever practised, or if the patient finds himself in his half-sleeping, half-waking moments with his hands playing with the penis. The patient should be at once told that unless a strict watch be set on these practices, a cure is not to be expected. At the same time he may be informed that the treatment about to be recommended will at once give him that power of resisting these tendencies, which he, unaided, has been so long in want of. Occasional failures will, no doubt, occur, owing to the fact that some men have no power of self-will; they have lost all control over themselves; this is seen more especially in those whose brain is affected. It should, however, not be concealed from the sufferer that the means about to be employed will speedily impart such power to the will that, by his own volition, if he can exert himself at all, he will be capable of correcting habits which were previously beyond his control. Moderation in sexual indulgence. if not abstinence, should be enjoined on the married, and a promise to that effect obtained. It should be next ascertained whether constipation exists, or whether ascarides be irritating the rectum, or the patient suffering from varicocele. If this last complication be present, a suspensory bandage must be worn, or, what is still better, a varicocelering, which the surgeon should teach the patient how to put on. The ring should be attached by a little piece of thread to the button of the drawers, otherwise it may readily slip off and be lost, and thus the testes be left without support during exercise.

The surgeon has next to determine whether the vesiculæ seminales are affected by any of the forms of irritation or inflammation spoken of at page 159, and, if so, whether the evil may not be kept up by some of the numerous causes which, as we have seen, produce or aggravate them. The patient must do his utmost to prevent emissions taking place, and, to effect this, should have recourse to all the means spoken of at pages 111 and 115.

In the slighter cases of spermatorrhea these remedies may alone suffice; and, as stated above, the occasional passage of an olivary bougie, or the glass tube of the instrument, hereafter to be described, at page 216, will suffice to cure the patient. If, however, these plans do not succeed, and if the emissions recur, I have no hesitation in at

once employing cauterization—a plan of treatment I will now proceed to describe.

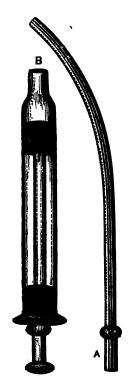
Cauterization.—In passing such an instrument, one of two conditions usually exists: either the instrument passes down to the veru-montanum without pain, when all at once excessive sensibility is felt in one or more spots; or the urethra is found large, patulous, and insensible, hardly seeming to feel the presence of the instrument; the former condition is, however, the one most frequently met with, and I usually counteract this by passing an instrument a few times before proceeding to operate.

Care should be taken not to administer an aperient the night before the operation, but precaution should be taken against the bowels being confined, otherwise the patient may wish to go to stool soon after the injection and thus complicate the case.

I usually prefer operating at my own house, having all my appliances at hand, and I have never found any objection to the patient return-

ing home in a cab if the distance is not great. On the morning of the operation the patient may be allowed to eat a simple breakfast of bread, butter, or meat, but he must be strictly enjoined to abstain from fluid of any kind.

Before proceeding to perform the operation I desire the patient to completely empty the bladder. I employ a syringe similar to the one here represented, which may be procured at Ferguson's, instrument-maker, Giltspur Street, Smithfield. It is made entirely of stout glass, to obviate breakage, and to avoid all decomposition of the solution of nitrate of silver. The lower part (A) can be taken off and on (at B), so as to fit into a case, thus making the instrument very portable. When put together and charged with fluid (containing a solution of ten grains of nitrate of silver to the ounce of distilled water), the instrument is passed down the urethra, the patient standing against a wall. No oil should be used, as it will interfere with the action of the caustic. The surgeon should take the precaution of folding a towel between the legs in order to protect the trousers of the patient from being stained. The piston of the instru-



AUTHOR'S INSTRUMENT FOR CAUTERIZING THE URETHEA.

ment is then to be forced down, at the same time that the finger and thumb of the operator's left hand compress the lips of the meatus firmly against the instrument, so as to prevent the fluid escaping from the urethra until the syringe is withdrawn, which is done as soon as the injection has been forced out of the instrument.

Before allowing the fluid to escape I with the index finger of the right hand press the fluid back along the urethra as far as I can, so as to bring it in contact with the posterior part of the canal; I then, on releasing the pressure, let the caustic solution pass out, and the whole escapes into the vessel used for the purpose. It may be well to see that the piston of your syringe acts truly, otherwise, in the case of patients who instinctively or involuntarily employ great muscular contraction, the fluid may be forced back behind the piston, and the operation thus fail of its effects.

The patient may now sit down in an arm-chair, and remain there a quarter of an hour. The first result of the operation is to produce a warm pricking sensation at the end of the penis, which soon, however, subsides, and usually in ten minutes disappears gradually. In some cases an urgent desire to make water may come on, but as the bladder has been previously emptied, this is a fictitious want, and rapidly passes off, the patient being told to restrain the desire as much as possible. As to the pain felt after the operation, I have been over and over again assured that the suffering consequent on the application of the caustic has been much less than the patient anticipated, and in some instances it has been so slight that the patient has doubted if any caustic can have reached the affected parts.

Other patients say they have experienced none of that shock to the nervous system which interested individuals had led them to believe was sure to follow the injection of a solution of nitrate of silver, and which they had read that medical men had understated, in order to induce patients to submit to the operation. The first effect of the operation is to produce an oozing from the urethra, caused by the escape of a drop or two of caustic mixed with mucus, and hence a piece of lint or a handkerchief should be placed around the meatus to absorb the moisture and protect the shirt from becoming stained. The patient within half an hour may be allowed to return home, but must not walk at all that day, and should swallow a copaiba capsule, repeating it every eight hours or after each meal. Too strict injunctions cannot be given to abstain from drinking fluid of any kind until after making water, and not to pass urine until absolutely obliged. Some men can easily remain twelve hours without passing water; a space of time which allows the caustic solution to produce its proper action on the mucous membrane. When the patient is no longer able to resist the desire of making water, say, twelve hours after the

operation, he may drink as much weak tea, soda-water, or diluents as he pleases. Immediately after the operation he may take his usual meals, abstaining, as before said, from fluid, and confining himself to an easy chair or sofa. During the few following hours some slight whitish discharge, like mucus, will flow from the urethra, but there will be little or no pain. When the patient first makes water there is some scalding, but the urine passes without difficulty. In some few cases, where I have reason to suppose there is an extra amount of irritability of the bladder, I have prescribed opium after the operation, but this is very rarely necessary. When the patient has made water once, he may continue to do so as often as occasion requires, and he will each time experience a diminution of the scalding sensation, until at last it wholly disappears. Until the scalding has wholly ceased the patient should take a tumbler of some diluent, such as sodawater, milk, cocoa, or toast and water, every two hours during the day, abstaining from it late at night, so as to prevent erections which would be painful.

On the day following the operation, a tinge of blood is sometimes noticed attending the last drops of urine, but this disappears in a day or two, the urine becoming again clear. On the second or third day the copaiba capsules may be dispensed with, and the patient may commence a course of tonics with gymnastic exercises, sponging, &c., as spoken of at p. 169. Violent exercise should not be indulged in for the first few days after the operation, but a moderate walk need not be interdicted. In from four to ten days the patient may take a little claret, and subsequently resume his usual mode of life, observing, however, abstinence from tobacco or strong coffee.

Lastly, I would again remark that patients who have undergone the operation all speak of the slight pain or inconvenience they have suffered from it, and they urge me to impress on others the trifling nature of what they had been assured was a formidable operation. It frequently happens that, when performed on the Saturday afternoon, the patient is able to resume his duties, if light, on the Monday, it having been only necessary to remain quiet on the Sunday.

Beneficial effects of the operation.—The advantages of injecting a solution of nitrate of silver are so manifold, that I now never employ any other plan, and yet I have occasionally to treat some of the most obstinate forms other surgeons have failed in curing. The operation as here described has never been attended with any unpleasant results, and I have never been called up, or been subsequently sent for, in consequence of the alarm of the patient. If the surgeon takes the precautions I have above spoken of, I have no reason to think that any untoward symptom can arise.

I am told that, in some of the books on spermatorrhea so largely

advertised in the papers, the operation is inveighed against in no measured terms. The only reply I wish to make is, that in my hands I find it most efficient and effectual, and my patients often regret that it had not been proposed to them earlier. As a result of cauterization, the patient succeeds in obtaining a control over the will which he never had before—the morbid irritability of the canal disappears—the emissions cease, and the health improves. The caustic appears to modify the local condition of the veru-montanum, and the effect is permanent if supported by other treatment. In this mode of operating the liquid comes in contact with every part of the canal, and does not leave untouched those depressions which probably are unaffected by the solid caustic, when Lallemand's instrument is employed. We also have every reason to believe that by this plan the fluid enters the follicles, which are so frequently the seat of the disease, and thus tends to the cure of the complaint.

There is one further observation I should like to make before closing these observations. The patient may be told not to be surprised if on the night after the operation, or on subsequent nights, an emission should occur; this may depend upon the irritation the caustic will produce in special cases. My experience tells me, however, that it rarely occurs, and as soon as the irritation passes off emissions cease to recur and a cure is effected.

Relapses.—The result of my experience proves that relapses of the local affection after cauterization do not often take place, nor is a second operation required; still every now and then cases like the following occur:—In 1853 I cauterized Mr —— for spermatorrhea; in August, 1854, he returned, telling me that after the last operation emissions had almost ceased, and his health improved, when within six weeks he paid attention to, and was the accepted lover of, a young lady. The marriage was to be delayed till Christmas. Lately the emissions had recurred with redoubled frequency, and he was relapsing into his former condition. Hearing that he would not see his intended for four months, I told him the emissions would probably cease, and if not, to take the ordinary precautions—baths, exercise (gymnastic), attention to diet and drink—and come to me a fortnight before his marriage, when I would repeat the operation.

The exceptional cases followed by relapses are those in which men are engaged, but owing to pecuniary or other circumstances cannot marry; we meet with relapses likewise among some who will not or cannot take regular gymnastic exercise.

The success which has attended this mode of operating has induced me to lay aside Lallemand's instrument, which, when I commenced practice more than five and thirty years ago, I used to employ. I have altered and improved the instrument I recommended on page 162 so much that I now consider it perfect, alike on the score of simplicity, usefulness, and impossibility of getting out of order.

As, however, in a work like this my readers may be desirous of comparing the one instrument with the other, I subjoin a woodcut of the catheter used by the Montpellier Professor; and I propose giving a précis of the mode of employing it, taken from his latest published edition.

Lallemand's plan.—A catheter should be passed in order to empty the bladder, and to judge of the length of the urethra. This, according to the Professor's recommendation, should be done by stretching the urethra, and, as the catheter is withdrawn, watching the moment when the water ceases to pass. On thus discovering the length of the canal, the finger should be placed on the instrument at the point just beyond the glans penis, in order that the exact depth to which the porte caustique should be subsequently introduced may be accurately ascertained. On the instrument which goes under Lallemand's name, there are means for measuring this distance, which can be fixed by the slide seen in the woodcut.

When I was in the habit of employing Lallemand's porte caustique, I did not find it necessary to pass a catheter, as I usually enjoined a patient not to drink on the day I proposed applying the instrument, and requested him to empty the bladder immediately before its introduction. It is a good precaution, moreover, to previously relieve the bowels by castor oil, or by means of an enema. The porte caustique must be prepared in the following manner:-- "Fuse some broken pieces of nitrate of silver in a watchglass held over a spirit-lamp by means of a pair of forceps, taking care to apply the heat at first at some distance, otherwise an explosion may take place; when fused, the caustic should be poured into the little cup (see woodcut), allowed to cool, and the projecting portions removed by a file; the canula must then be returned into the closed instrument, which, after being oiled, may be passed down into the bladder, the patient being in bed or lying on a sofaa surgeon at all in the habit of passing instruments is able to distinguish when the instrument enters the viscus. The diseased part is at once known (so



LALLEMAND'S PORTE CAUSTIQUE.

Lallemand states) by the instrument causing some pain to the patient on reaching it. This once ascertained, the surgeon will withdraw the outer canula to the extent of half an inch, and at the same time give a rotatory motion to the inner canula containing the caustic. By this means the diseased surface is slightly cauterized, eschars are not necessarily formed, nor are any passed in the urine, and the internal canula, being drawn within the external one, cauterization is confined to the morbid structures only. Rest in the horizontal position must be enjoined, and the patient desired not to make water for some hours. If pain comes on, a good dose of laudanum, or an enema with opium, may be prescribed. For the few following days there is some pain in making water. The discharge increases, and is mixed with a little blood; but by attention to diet and rest, together with moderate doses of copaiba or cubeb capsules, these symptoms abate, and with them the emissions, although in some cases the cauterization may induce one or two escapes of semen during the following nights. Sexual intercourse must be strictly prohibited, and any cause which may originally have produced spermatorrhea must be studiously avoided. In some cases it may be necessary to have recourse to a second or third application of the caustic; but at least ten days should elapse between each cauterization, and any accidents which may arise must be treated on general principles.

In the annexed woodcut the instrument is nearly straight, but experience taught me that such catheters cannot readily reach the bladder, and I formerly employed instruments with a considerable curve, which facilitated their passage. The cup is usually made too deep; this causes the surgeon to use not only a large proportion of caustic, but requires great care in removing the salt when it has been used. After performing the operation, I immediately withdrew the canula, and soaked both it and the part holding the caustic in water, or with a pointed instrument removed the nitrate of silver.

Lallemand does not assert that his plan of cauterization will be always successful. "It has succeeded," he says, "in cases where atony and debility were the prominent symptoms; less rarely when accompanied with nervous symptoms, and a strong hereditary tendency." (Vol iii, p. 392.) Again he says, "Two thirds of the cases of spermatorrhea would be beyond the resources of our art, were it not for the assistance we derive from this powerful medication." (Vol. iii, p. 406.)

In twenty years, during which he was daily in the habit of using the instrument, he asserts (p. 401) that he never saw any ill consequence arise from the treatment, and I can fully bear out this statement, as far as my own experience is concerned.

Treatment after Cauterization.—As soon as the effects of cauteriza-

tion have subsided, the surgeon should take steps to improve the general health. All the remedial measures (which others may have tried in vain before the cauterization) to build up the health of the patient may now be employed with the greatest advantage. Among the foremost of tonic agents stands the sponging-bath, of which we have already spoken (p. 53), and I usually recommend my patient to employ it in the evening on going to bed as well as in the morning, or at least to sponge the generative organs over every night before getting into bed. I find this plan much preferable to bathing in the sea or in river water, as under the latter circumstances an occasional bath is only indulged in, as rain, wind, or chilly weather, may occasion its omission, whereas we can always depend upon a sponging bath whatever the weather, and I repeat it is much better that the water be used with the chill off even in summer, for such patients are usually excessively susceptible of cold, and bear chilled water very indifferently, reaction taking place with difficulty.

I prescribe early rising; the patient in summer should not be in bed later than 7 o'clock. On awaking he may drink a tumbler of cold water, particularly if there is a tendency to constipation. Some may take walking exercise before breakfast. If, however, this induces faintness, I suggest eating a piece of bread or biscuit before starting, to be followed by breakfast soon after the patient's return home. As a rule, it is injudicious to take exercise either on an empty or a full stomach. Rest and reading should follow light meals.

In addition to the employment of the sponge-bath, a patient should take regular exercise short of fatigue—as boating, fencing, rackets, quoits, riding, boxing, and gymnastics generally. To ensure regularity in London, I usually recommend a convalescent to place himself under the tuition of one of those persons who superintend gymnasia, and who are usually very attentive. If my patients cannot stay in London, I devise some scheme for exercise which they may be able to carry out at their own homes. Thus—

One may be able to cleave wood, another to grind corn in a mill, another may prefer skittles or bowls. Quoits afford excellent athletic exercise; a cart-rope attached to a bough of a tree, or beam in a barn or shed, will serve as an extempore gymnasium. If no other means of obtaining muscular exertion be possible, I recommend dumb bells or the Indian clubs. In one or other of these ways muscular exertion must be regular employed. Excessive walking I find objectionable, as if carried to any extent it may produce determination of blood to the sexual organs and subsequent emissions; the same objection may be urged against riding on horseback. The effect of exercise in diverting the activity of the circulation from the genital organs into other channels was known to the ancients, who, with their very numerous gymnasia,

could not fail to remark the continence of the athletes. It is likewise a well-known fact that those who are obliged to undergo great physical exertion are remarkable for their abstinence from sexual intercourse. The moderns who are training are well aware that such indulgence wholly unfits them for great feats of strength, and the captain of a boat strictly prohibits his crew from anything of the sort previously to a race. Some trainers have gone as far as to assure me that they can discover by a man's style of pulling, whether he has committed such a breach of discipline over-night, and have not scrupled to attribute the occasional loss of matches to this cause.

The diet of convalescents taking gymnastic exercise should be attended to pretty carefully. Thus, for breakfast, I prescribe cocoa and milk, and I recommend the cocoa nibs stewed down for several hours as preferable to the cocoa sold ready prepared in the shops.

Tea, coffee, and tobacco I look on as so many poisons for persons suffering under nervous depression such as we are here speaking of. It is in vain to recommend weak tea, so I prohibit tea or coffee for breakfast, and substitute in summer aerated-water, soda-water, or limewater with cream or milk, provided the urine does not become alkaline or deposit the phosphates. In these latter cases I at once have recourse to claret and water, which is an excellent substitute for tea or coffee; and in winter I recommend the patient to employ lukewarm water to mix with his claret.

The taking warm fluids for breakfast is a habit that may be soon got over. I am convinced that deluging the stomach of invalids with hot strong fluid is injudicious, but at first it is somewhat difficult to induce patients to become singular and take cold fluids for breakfast. Stale bread and a moderate quantity of lean meat are advisable if the patient has a fair digestion, and if he does not feel oppressed after eating. I order luncheon for those who dine late, which may consist of a small portion of meat and stale bread, with a glass of sherry or a little bitter beer. This mid-day meal is absolutely necessary, for I find if a man in exercise does not take nourishment in the middle of the day, he eats voraciously at dinner, and his digestion becomes impaired. I forbid late dinners, and counsel plain but wholesome diet. I forbid fried fish, cheese, pastry, or suet-puddings, and advise only moderate quantities of meat, vegetables, and bread, with a pint of bitter beer or three moderate-sized glasses of wine (claret or sherry). Both (beer and wine) should not be taken at the same meal. The rules of diet that are followed in training may be interesting, though I would not recommend an invalid to attend to them strictly, except under medical advice.

One of the most successful pedestrians of the day thus described his mode of living to me. He rose early, walked one mile and a half out and back, then had a sponge-bath and took his breakfast, consisting of a cup of weak tea, or of eggs beaten up instead of milk, and a small quantity of meat. Then his exercise again, change of flannels, a rub down; as regards flannels he told me he preferred wearing a tight flannel waistcoat, not merino or flannel shirts, as they felt cold if not changed. At half-past 12 o'clock he took a moderate dinner of meat, with vegetables, rice, sago, or light pudding, and a small quantity of bottled stout. In the afternoon he took his exercise again, tea at five, no meat but a little lettuce or watercress, and at eight or nine a little arrowroot or light supper, and then to bed in blankets. I may add that this man was, although in very vigorous health, most moderate in sexual indulgence.

To this account I may add a description of the training that boating men go through:

"The training of University oarsmen consists of early hours, running, rowing, and a temperate use of the most nourishing food and drink. The same treatment cannot be prescribed for all constitutions; but the following seems to be about an average specimen of the way in which the month preceding the match is spent. All meet at 7 a.m., and run a couple of miles—at first gently, afterwards at a sharp burst; this is essential, as it is the only improver of the wind. After a tub and rub, they breakfast together in turn at one another's rooms, and have broiled steaks and chops, bread and butter, watercresses, and tea in moderation. A little reading fills up the morning capitally, and keeps the mind quietly occupied; indeed, high classical attainments and good rowing often go hand in hand. At 12.30 a biscuit and a glass of wine, and at 2 p.m. down to the river to row the course. This over, they have a comfortable wash, and then dine together upon beef or mutton sufficiently roasted, broiled, or boiled, wholesome vegetables, plain jelly, watercresses, lettuces, and a pint of sound home-brewed ale. Pork, veal, salted meat, made dishes, pastry, cheese, condiments, and smoking are forbidden. Those who are used to wine are allowed a glass or two after dinner. All ought to be in bed shortly after 10 o'clock; and, for those with whom it agrees, the best thing to take as supper is a basin of carefully-made plain oatmeal water-gruel. But training is very ticklish work with many men; they are apt to get feverish, and nearly the same round of food day after day often palls. Again, about ten days after the system of training has been begun, a period of depression sometimes occurs; this, however, is a turningpoint, and once passed, the patient feels brighter and harder. The mentor and the coxswain strive to keep the crew cheerful and goodtempered one with another, free from all sensations of staleness and over-

¹ This rule has been a little relaxed of late years, and a very moderate indulgence in tobacco has been allowed, and indeed considered beneficial,

training. If the cast of character includes a good low-comedy man, so much the better."—Once a Week.

Of late years the theory and practice of training has received a good deal of attention, and I find on referring to a book published by Archibald Maclaren, at Oxford, that the present system of training men for the University boat races is very much the same as I have described. The modern plan seems to be not to stint a man of water; he should, however, be advised not to drink more than a pint of beer at his meals. I therefore should suggest that a thirsty man had better at first quench his thirst with water, and take his beer subsequently.

Butter seems to be taken only in moderate quantities, and men in training are allowed marmalade. In regard to the use of this article of diet I have some misgivings, as it often produces a sick headache in certain constitutions, and I am sure it could not be taken by persons passing the phosphates without increasing the alkalinity of the urine, and consequently doing in these instances much harm.

In other respects I am glad to find that science and practice go hand in hand in training, and that the young men of the day are instructed in the very best plan of improving their muscular powers with the least strain on their constitutions.

Another recommendation, in which I fully concur, is that a man in training should be in bed before 11 o'clock, and early rising cannot be too strongly inculcated.

A statement is made which I was unprepared for, that under training and exercise a man's chest may become developed from thirty-two inches to thirty-four, and that some men measure as much as thirty-eight inches around the chest.

FALSE SPERMATORRHŒA.—DISEASES SIMULATING SPERMATOR-RHŒA.—QUACKS

In the first edition of a work I published on 'Diseases of the Urinary and Generative Organs,' I wrote a chapter entitled Syphiliphobia, in which I collected together a variety of complaints that presented many of the characteristics of true disease. Since then a wider knowledge of these subjects has sprung up. Hypochondriacs and a large class of patients who have leisure to dwell on their morbid thoughts and feelings have, by reading the books formerly so freely advertised in the quacks' corner of the newspapers, come to the conclusion that they are suffering under spermatorrhæa—a word with which they are now familiar. In this corner formerly five or six such advertisements directed public attention to the so-called disease; the headings of "Manly Vigour" and "Secret Diseases" have disappeared, and are

replaced by the term "Spermatorrhea," the form of sexual disease now in fashion; and as, in such hypochondriaco-misanthropic persons, the sexual feelings are generally more or less affected, the conclusion is arrived at that every one who, with a bad conscience, feels himself out of sorts, is suffering from some of the forms of spermatorrhœa. There is a fashion in diseases, just as there is in amusements or occupations. Patients come to us, half persuaded that they suffer in the way described, but still in some doubt whether what they complain of is fancy or the real disease. In such cases we have too often to deal with ignorance, irritability of temper, and sometimes with true symptoms, though magnified by great exaggeration, and no inconsiderable alarm about the consequences. Conscience tells many that their previous lives have been far from faultless, and the above pseudo-medical books exaggerate the consequences of indiscretion, and predict the most awful consequences, describing trains of symptoms enough to frighten the most courageous. It cannot be difficult for my readers to surmise what must be the effect on the ignorant, the weak-minded, and those already depressed by their fears, with no friend at hand to confide in or to calm their excited feelings. Too many threw themselves into the meshes of these harpies, and the consequence was that they were fleeced to an amount that is almost inconceivable, except to those familiar with the swindling transactions of the class. As I may not have another opportunity, I would just mention a few circumstances out of many that have come under my personal knowledge. A student at Cambridge sought my advice suffering from one of these sexual complaints, half real, half ideal. When cured, he mentioned that, before coming to me, he had consulted one of the advertising firms, and after paying some £40 in fees, was told that he could be cured only after giving his note-of-hand for £300. Worn down by his alarms, fearful that he should never get well without compliance, and being of a very delicate and susceptible disposition, he signed the agreement, and the purport of his visit was to show me a letter in which the £300 was demanded in a very peremptory manner. I advised him to put the case into a competent lawyer's hands, and, after some hesitation on his part, this was done. The interviews between the opposing solicitors were very characteristic, but to describe them would occupy too much space here; suffice it to say, my patient's letters were only given up after a compromise had been effected by the payment of a sum of money.

In another case, a nobleman was asked for and gave £1000 to one of these advertising firms; they had the impudence to ask another £1000

¹ Since the earlier editions of this book were published, its title has been pirated by more than two persons in such advertisements. On inquiry I found that it was impossible to prevent any one copying my title.

some time after, under the plea that his case was a particularly difficult one. This somewhat surprised his lordship, and the family solicitor was consulted. All attempts, however, to induce the quack to refund the £1000 failed, probably in consequence of the threats of exposure used by the firm.

Those who may be curious to know the former practices of quacks may consult the Appendix B, p. 249, of the fifth edition of this book.

In the more recent cases in which appropriate legal proceedings have been threatened, a moiety of the money has been returned, without recourse to an open trial; but it too often happens that the dupe prefers losing his money to the chance of having his weakness exposed.

This alternative, which is always threatened but never carried into effect, however, is no longer found necessary. I once thought that the exposure of such nefarious practices would do good, but I now feel convinced all that can be done with advantage is to secure a return of the money. The frequent recurrence of prosecutions for almost any disgracefully nefarious crime shows that the trial of one case does little, if anything, to prevent others from occurring attended with exactly the same features of rascality and credulity; and I am afraid that no medical bill will cure the evil under consideration, though it may possibly change the modus operandi. The only efficient remedy for this system of plunder is that the profession should no longer allow it to be supposed that medical men shun the treatment of this class of diseases. It should be clearly understood by sufferers, that surgeons of repute willingly undertake the treatment of these as well as all the other ailments to which flesh is heir, and that it is by no means necessary to resort to quacks or advertising firms. If, however, medical men desire to obtain the confidence of this class of patients, they must be prepared to listen patiently to their statements, and not pooh-pooh what at first may seem fanciful, a practice that has been too frequently followed, if the statements of patients can be believed.

Sufferers from false spermatorrhea are as fully convinced that they suffer from the real ailment, the symptoms of which they complain of, as do actual invalids, and I have too much reason to think that my profession does not always appreciate these ideal sufferings. Rather with Dr Reid in his treatise on hypochondriasis we would say: "Nothing surely can surpass the inhunanity, as well as the folly, with which patients of this class (sufferers from nervous diseases) are too frequently treated. We often act upon the ill-founded idea that such complaints are altogether dependent upon the power of the will; a notion which, in paradoxical extravagance, scarcely yields to the

doctrine of a modern, though already obsolete, writer on 'The Philo' sophy of Morals,' who asserted that no one need die, if with a sufficient energy he determined to live. To command or to advise a person labouring under nervous depression to be cheerful and alert, is no less idle and absurd than it would be to command or advise a person, under the direct and most intense influence of the sun's rays, to shiver with cold, or one who is 'wallowing in December's snows' to perspire from a sensation of excessive heat. The practice of laughing at or scolding a patient of this class is equally cruel and ineffectual. No one was ever laughed or scolded out of hypochondriasis. It is scarcely likely that we should elevate a person's spirits by insulting his understanding. The malady of the nerves is in general of too obstinate a nature to yield to a sarcasm or a sneer. It would scarcely be more preposterous to think of dissipating a dropsy of the chest than a distemper of the mind, by the force of ridicule or rebuke. The hypochondriac may feel, indeed, the edge of satire as keenly as he would that of a sword; but, although its point should penetrate his bosom, it would not be likely to let out from it any portion of that noxious matter by which it is so painfully oppressed. The external expression of his disorder may be checked by the coercive influence of shame or fear; but, in doing this, a similar kind of risk is incurred to what arises from the repelling of a cutaneous eruption, which, although it conceals the outward appearance, seldom fails still more firmly to establish the internal strength, to increase the danger, and to protract the continuance of the disease." (Loc. cit., p. 7.)

The immediate consequence of a surgeon not attending sufficiently to these cases is, that the patients, who are often very sensitive, finding the profession unwilling to sympathise with them, at once resort to the quack fraternity, who humour their delusions at the same time that they fleece them, and have even been known to administer to their dupes depressing medicines so as to retain them still more surely in their The only other way in which this infamous trade can be checked is for the newspaper press to refuse to insert the quack adver-The more powerful organs have already done so to a certain extent, and with the best effect; and if this refusal were made general the system could be at once put a stop to. The Post Office authorities might assist also by refusing to circulate the pamphlets and even books which these advertising firms now despatch wholesale to the country, and by this means bring their plans for fleecing their dupes to the notice of every family in the kingdom. It is an abuse of the POST OFFICE which we should think need only be brought officially under the notice of the Postmaster General for an effectual remedy to be applied.1

I have lately (1874) seen that the London police magistrates have taken cogni-

The symptoms which patients who suffer from false spermatorrhea complain of are frequently of the most exaggerated description; they have been mentioned in the previous pages, and it is for the medical man to decide whether they are real or assumed. Frequently they partake of both characters; there is a certain proportion of true disease which has been aggravated by fear and ill-treatment; and I believe, as stated elsewhere (p. 26), that determination of the thoughts to a particular organ may superinduce, in a greater or less degree, its functional aberration. Admitting this, great sympathy must be shown to a class of sufferers whom I fear the profession often treat with too little regard to their susceptible feelings.

In 1854 a medical student wrote to me from the country, saying that he had been twice cauterized; and he added, "supposing all further measures you may suggest for trial fail, what do you think of the operation of castration as a remedial means?" I wrote in answer, that the operator and the operated upon should be both placed in a lunatic asylum, and that I declined prescribing without seeing the patient, experience having taught me the inutility of doing so. This man represents a large class who will undergo any amount of present physical suffering to rid themselves of the ailment under which they believe they labour; and the probability always is, that these exaggerated accounts of disorders will turn out to be cases such as we are now speaking of-namely, real complaints enormously magnified by a highly irritable temperament. If not judiciously treated, such sufferers will assuredly end their days in asylums. I every now and then see patients who avow that they owe their lives to me, since, had it not been for the assistance and sympathy held out to them, they had determined to destroy themselves—so firmly convinced had they become that they were labouring under an incurable malady, the nature of which they believed was apparent to all beholders. It is these victories of sympathy and science that make up for the disappointments medical men sometimes meet with in this sad department of the profession.

From what I occasionally witness, I am convinced that many of the suicides occurring among young men have been caused by the ineffectual treatment of supposed spermatorrhoa, and the fixed idea that no relief can possibly be obtained. If any additional reason can be urged why the profession should take these cases under its more immediate care it is this—the saving from utter destruction the future of a class of men, many of whom have, through the instrumentality of surgical

zance of and punished the distribution of fly-sheets of this description too often thrust into the hands of persons passing along the streets by the poor threadbare men employed for the purpose, who, in the pay of quacks, distribute what has (by magisterial authority) been called obscene literature. This has proved an efficient way of putting down one form of quackery.

means, been rescued from this unhappy state of mind, and to my certain knowledge have become useful members of society, and are now discharging most important duties in the higher ranks of their several professions.

Treatment.—The most difficult thing in the management of these cases is to bring the patients to exercise self-control. They have never been taught it early in life, and they have never practised it since they have arrived at adult age; yet without its exercise all our endeavours to obtain convalescence will fail. This self-denial must be mental as well as physical; the sufferers must be impressed with a full determination not to allow themselves to dwell on or think of their complaint. Such self-treatment is indispensable; these moral gymnastics are absolutely necessary, and they may be much assisted by regular bodily exercise and physical exertion, accompanied by a régime such as that described at page 168.

Another of the difficulties which the medical man has to meet, is that of being unable to persuade the misanthrope to seek cheerful society, and to give up his solitary habits and moping ways.

The judicious treatment of a spoilt child must be the type for the surgeon to follow. He must display tact and knowledge of men, for what will succeed with the illiterate will fail with the imaginative and the intellectual, who must be reasoned with and convinced before much can be done with them. Above all things, a favorable prognosis, if not inconsistent with conviction, should be given. The power which conscientious self-reliance, founded on a real knowledge of disease, gives a medical practitioner, especially in these cases of incipient mental disease, is remarkably great. The physician's convictions appear to be sympathetically communicated to his patients, and the moral influence thus established, once in full play, materially accelerates the cure. This power of imparting convictions and of controlling the will of the patient, so desired by the young surgeon, is more or less innate, but I believe can be developed by attention and extensive practice; it is frequently favoured by the inferior mental acquirements of the patient, who feels comfort in reposing on one whose knowledge and truthfulness the invalid has learnt to respect.

Necessary, however, as the moral treatment I have above spoken of may be, it must often be aided by physical exertion, attention to diet, &c. In addition, local stimuli may be often necessary. When the hope can again be indulged that the dreaded impotence may, after all, be only a delusion, these and all other stimulants should be left off.

It may be advisable to interdict all sedentary and intellectual employments for the time being, and to recommend the substitution of light literature, open-air exercise, and change of scene; and I know of nothing that tends so much to the benefit of a patient as does a walking tour with a knapsack, particularly if he can secure the society of a pleasant companion. It is surprising what even a short trip of this kind will do, when a visit to Switzerland cannot be undertaken.

I advise patients to avail themselves of the advertised trips of Messrs. Cook, of Ludgate Circus. By the payment of a stipulated sum the firm personally conduct their clients round the world, or through Ireland, England, and Scotland, without trouble or anxiety to the invalid. This is just what many of my patients require, who, without Messrs Cook's assistance would, I am sure, never have undertaken the journey, long or short, or have enjoyed the society of their fellow-travellers, and again re-entered the world or sought recreation and health in travel. It is by such means that I have been able to effect many a cure for patients whose cases had been considered hopeless.

Before closing these remarks on false spermatorrhea, I am glad to have the opportunity of inserting a letter from the late Sir B. Brodie sent in reply to one from a patient of this class, who has asked me to print it for the benefit of sufferers.

Broome Park, Betchworth, Surrey, October 14, 1854.

SIR,-Your letter reached me this morning at my country house, where I am staying for my annual vacation. I am sorry that my absence from London has caused some delay in my answering it. The practice that you mention is certainly a very bad one, and, if carried to excess, is often productive of very ill consequences. At the same time it must be owned that those who have been guilty of it are often led to think that they suffer from it more than they really do, by the obscene and wicked representations of quacks, whose object is to frighten young men and extort money from them. I have little doubt that you are one of the numerous class of persons who are unnecessarily alarmed. Most of the symptoms which you mention are nothing to the purpose. Many persons besides yourself have pimples on the skin which are of no consequence, and can have nothing to do with the bad habits to which you refer, though one testicle always hangs lower down than the other. (It would be very inconvenient if it were otherwise.) You cannot have been made impotent. If you were, you could not have nocturnal emissions; to which, by the way, all young men who are not having regular sexual intercourse are more or less liable. You cannot really be very weak, as you walk seven or eight miles daily, and could, if it were necessary (as you say), walk fourteen or sixteen miles. I can perceive, however, that you are very nervous, and I dare say that you have a weak digestion. I advise you first to take the mixture of which I enclose the prescription twice daily; to live on a plain and simple diet, avoiding malt liquors, raw fruit and vegetables; and drinking merely a small quantity of sherry or weak brandy and water. Probably a visit to the sea-side will do you good. It is important that you should keep your mind well occupied. You must not expect to be relieved from the nocturnal emissions until you are married.-I am, Sir,

Your obedient servant,

B. C. BRODIE.

P.S. The medicine should be taken for three weeks; perhaps longer.

CHAP. IV.—SEXUAL INTERCOURSE

THE ACT OF COPULATION.—In order to deal intelligently with cases in which sexual congress is not properly performed, it is necessary clearly to understand in what the act of copulation consists. It is thus described by Carpenter: — "When, impelled by sexual excitement, the male seeks intercourse with the female, the erectile tissue of the genital organs becomes turgid with blood,1 and the surface acquires a much increased sensibility. This is especially acute in the glans penis. By the friction of the glans against the rugous walls of the vagina the excitement is increased, and the impression which is thus produced at last becomes so strong that it calls forth, through the medium of the spinal cord, a reflex contraction of the muscular fibres of the vasa deferentia, and of the muscles which surround the vesiculæ seminales and prostate gland. These receptacles discharge their contents into the urethra, from which they are expelled with some degree of force, and with a kind of convulsive action, by its compressor muscles. Now, although the sensations concerned in this act are ordinarily most acutely pleasurable, there appears sufficient evidence that they are by no means essential to its performance, and that the impression which is conveyed to the spinal cord need not give rise to a sensation in order to produce the reflex contraction of the ejaculator muscles." ('Principles of Human Physiology,' 7th edition, p. 826.) The muscular contractions which produce the emissio seminis are excito-motor in their nature, being independent of the will and not capable of restraint by it when once fully excited, and being (like those of deglutition) excitable in no other way than by a particular local irritation.

As stated in the above paragraph, the sexual act is ordinarily attended with great pleasure. In fact, from the risks which animals will run to enjoy the gratification, and the recklessness with which even the wildest male will approach the tame female when in heat, it would seem that no pleasure is equal to this.² There is every reason

In fishes copulation, properly speaking, does not take place. According to Mr Walsh, a close observer who wrote an account in the 'Field' newspaper for March 7th, 1863, the mode of impregnation is as follows:—"The female fish does not first deposit her spawn, and then leave it to be impregnated by the male; the male cares nothing for the spawn, except to cat it; his desire is for the female, for the possession of whom he will fight as long he is able. The spawning process is carried on in this

¹ See page 180 for explanation of this.

² I am speaking here, it will be observed, of the pleasure experienced by the male. In the females of many animals, and especially of those low down in the scale of existence, we can scarcely believe that any gratification at all attends the act.

to believe that it is the mere and simple act of emission which gives the pleasurable sensations in animals which (like many birds) have no intromittent organ. This pleasurable sensation, however, is of momentary duration; like a battery, it exhausts itself in a shock. The nervous excitement is very intense while it lasts, and, were it less momentary than it is, more mischief would probably result from repeated acts than ordinarily happens.

Parise has remarked, perhaps with some exaggeration, that "if the pleasurable moments, as well as the torments, which attend love lasted, there would be no human strength capable of supporting them, unless our actual condition were changed."

A kind of natural safeguard is provided against the nervous exhaustion consequent on the excitement of coitus, by the rapid diminution of the sensation during successive acts. Indeed, in persons who repeat coitus frequently during the same night, the pleasurable sensation will diminish so rapidly that the act at last will not be attended with any.

This pleasure, in fact, seems in its own way to be subject to the same laws which apply to our other gratifications. As Carpenter says—"Feelings of pleasure or pain are connected with particular sensations, which cannot (for the most part, at least) be explained upon any other principle than that of the necessary association of those feelings by an original law of our nature with the sensation in question. As a general rule, it may be stated that the *violent* excitement of any sensation is disagreeable, even when the same sensation in a moderate degree may be a source of extreme pleasure."

By this merciful provision nature herself dictates that excesses must not be committed. The frequent complaint heard from persons

manner:—The female works away at the ridd, and after she has made a kind of trough she lies in it quite still; the male—who, during the time she is working, is carrying on a constant war—comes up, enters the trough, and lies side by side with the female; they then fall over on their sides, and with a tremulous motion the spawn and milt are exuded at the same instant. The male then drops astern. After a short time the female again throws herself on her side, and fans up the gravel, advancing the trough a little, and covering up the deposited spawn. The operation is repeated till both fish are exhausted. A great quantity of spawn is of course wasted, being eaten by trout and other fish, which are always waiting about for the purpose. The exhaustion of the males is greater than that of the females; they die in numbers; the females do not die. You may pick up a great many exhausted and dead males, but never a female."

In some animals the act must, we would think, be an unmitigated distress and annoyance to the female. The female frog, for instance, is not only encumbered with an abdomen distended with ova, but is obliged to carry about her husband on her back as long as he may see fit, as he is provided by nature at this period with an enlarged thumb, which enables him to keep his hold, so that the female is unable to shake him off.

who have committed excesses, that they experience no more pleasure in the act, is the best evidence we can have that nature's laws have been infringed.

The physiological explanation of the pleasure attendant on the sexual act is, perhaps, as follows:—"Accumulation of blood," says Kobelt, "causes, whenever it occurs in the body, a gradual augmentation of sensibility; but in this case the glans penis, in passing from a non-erect state to the condition of complete turgescence, becomes the seat of a completely new and specific sensibility, up to this moment dormant. All the attendant phenomena react on the nervous centres. From this it appears that, in addition to the nerves of general sensibility, which fulfil their functions in a state of repose and also during erection, although in a different manner, there must be in the glans penis special nerves of pleasure, the particular action of which does not take place except under the indispensable condition of a state of orgasm of the glans. Moreover, the orgasm once over, the nerves return to their former state of inaction, and remain unaffected under all ulterior excitement.

"They are, then, in the same condition as the rest of the generative apparatus; their irritability ceases with the consummation of the act, and, together with this irritability, the venereal appetite ceases also to be repeated, and to bring about the same series of phenomena at each new excitement."—Kobelt, 'Die männlichen und weiblichen Wollust-Organe des Menschen und einiger Säugethiere,' p. 35.

Many foreign writers maintain, and the above observations would seem to corroborate the assertion, that the chief source of sexual pleasure resides in the glans penis. That it has a considerable share in the sensations experienced is very true, but from certain cases that have come under my notice, I cannot help thinking that it has less to do with them than is generally supposed. Some time ago I attended an officer on his return from India who had lost the whole of the glans penis. This patient completely recovered his health, the parts healed, leaving but a stump of the penis two inches in length. I found, to my surprise, that the sexual act was not only possible, but that the same amount of pleasure as formerly was still experienced. He assured me, indeed, that the sexual act differed in no respect (as far as he could detect) from what it had been before the mutilation.

Duration of the Act.—It is, indeed, a wise provision that in the human being the act should last but a short time—some few minutes.

In animals the greatest differences in this particular take place.

Thus I read in the 'Description of the Preparations of the College of Surgeons,' that "the coitus in the kangaroo, and probably in other marsupials, is of long duration, and the scrotum during that act disappears, and seems to be partially inverted during the forcible retraction of the testes against the marsupial bones."—No. 2477, *Physiological Catalogue*, by Owen.

The act of copulation, as I can testify, in the moth of the silk-worm is very prolonged. The male is the smaller and darker of the two, and as soon as he leaves the grub state he is ready for the act. He then vibrates his wings with a very singular humming noise, and goes round and round the female. The tails are then approximated, copulation takes place, and lasts for days. As soon as the sexes separate, the same process is repeated, and sexual congress again occurs. It would almost appear as if the short life of these insects was passed in copulation. The female moths died first in all the cases I witnessed, but the males, although surviving the females, were dull and could hardly move, being apparently thoroughly exhausted by their reproductive labours.

In the chapter on erection (p. 80) we have noticed the prolonged copulation of the dog. In some other classes of animals it takes place with wonderful celerity. Among deer for instance, it was at one time stated that coitus had never been observed even by the oldest keepers. Professor Owen mentioned that it may be witnessed in Richmond Park, somewhat in the following way:—The buck will be seen to scrape hollows two or three feet deep in certain portions of the park; to these places he leads the does. One by one, they place themselves in these hollows; the buck drives away all other bucks from the neighbourhood, then, with a rush, mounts the doe; in an instant the act is accomplished, and the female retires to be replaced by another. Professor Owen says he cannot explain why these hollows should be made in the ground, as there is nothing in the conformation of the doe to require that she should be placed on a level lower than that which the buck leaps from. However, though the act itself is instantaneous, the premonitory excitement is of long duration. It is possible, therefore, that erection lasts but for an instant, and hence the convenience of this preparation and position.

Mr Thompson, the late superintendent at the Zoological Gardens, told me that he has seen copulation take place in the stags both in the wild state and in confinement. He thinks that a peculiar place is not necessary for the act. He agrees that it is effected in a few moments, and that in the case of the giraffe, also, no peculiar position is necessary.

The Effect of the Act.—The immediate effect of the act on the male deserves some few remarks. Even in the healthiest and strongest person a feeling of fatigue immediately follows.

This nervous orgasm is very powerfully exhibited in some animals. The buck rabbit, for instance, after each sexual act, falls on his side. the whites of his eyes turn up, and his hind legs are spasmodically agitated. The cause of this, and the corresponding phenomena in other animals, is the nervous shock which particularly affects the spinal cord.

The way in which this shock affects a healthy man is, generally, to make him languid and drowsy for a time.

This temporary depression has not escaped the observation of the ancients, who have remarked—

"Læta venire Venus tristis abire solet;"

and again-

"Post coitum omne animal triste, nisi gallus qui cantat."

So serious, indeed, is the paroxysm of the nervous system produced by the sexual spasm, that its immediate effect is not always unattended with danger, and men with weak hearts have died in the act. Every now and then we learn that men are found dead on the night of their wedding, and it is not very uncommon to hear of inquests being held on men discovered in houses of ill-fame, without any marks of ill-usage or poison. The cause has been, doubtless, the sudden nervous shock overpowering a feeble or diseased frame.

However exceptional these cases are, they are warnings, and should serve to show that an act which may destroy the weak should not be tampered with even by the strong.

Iallemand well describes the test which every married man should apply in his own case:—"When connection is followed by a joyous feeling, a bien être général, as well as fresh vigour; when the head feels lighter, the body more elastic and ready for work; when a greater disposition to exercise or intellectual labour arises, and the genital organs evince an increase of vigour and activity, we may infer that an imperious want has been satisfied within the limits necessary for health. The happy influence which all the organs experience is similar to that which follows the accomplishment of every function necessary to the economy."

How serious—how vital an act, so to speak, that of copulation is, appears from the marked changes which accompany its performance in some animals. It is a well-accredited fact that in the rutting season buck venison is strong, lean, and ill-flavoured. At this time, we are told, the flesh becomes soft and flabby, the hair looks "unkind;" and in birds, the feathers, after the season of breeding, are in a ruffled state, and droop. The horns of stags (see Effects of Castration, p. 130) fall off, and the blood is occupied in supplying the consequent demand for new osseous matter.

It is before the spawning season has passed that we prefer the herring, and it is only while it is filled with roe that we care to eat the mackerel. A spent salmon is not fit food for man; and, at this period, as all fishermen are aware, the vivid colours of the trout disappear; and the fish retires exhausted and impoverished, until the vital forces are regained.

Repetition of the Act.—Whilst one individual will suffer for days after a single attempt, or even from an involuntary emission, another will not evince the least sign of depression, although the act be repeated several times in succession or on several consecutive nights. Still, as a general rule, the act is and ought to be repeated but rarely. In newly married people, of course, sexual intercourse takes place more frequently, and hence it happens that conception often fails during the first few months of wedlock, depending probably upon the fact that the semen of the male contains but few perfect spermatozoa: in such cases it is only when the ardour of first love has abated, and the spermatozoa have been allowed the time requisite for their full development, that the female becomes impregnated.

This part of my subject will, however, occupy further attention when I come to speak (page 191) of marital excesses. I may, however, here state that the monthly periods, of course, put a temporary stop to intercourse, while nature provides a further check upon its too frequent repetition, in the effect which pregnancy produces on the female, and through her upon the male.

If the married female conceives every second year, we usually notice that during the nine months following conception she experiences no great sexual excitement. The consequence is that sexual desire in the male is somewhat diminished, and the act of coition takes place but rarely. Again, while women are suckling there is usually such a demand made on the vital force by the organs secreting milk that sexual desire is almost annihilated. Now, as experience teaches us that a reciprocity of desire is, to a great extent, necessary to excite the male, we must not be surprised if we learn that excesses in fertile married life are com-

We are apt to believe that in the human female it is almost impossible for gestation and lactation to go on simultaneously. In the mare, however, this occurs. In large breeding establishments the mare is usually put to the stallion, and will "show to the horse" nine days after a foal is dropped. The object of this of course is that in eleven months she shall again give birth to another foal. This is the surest way to obtain foals, although the produce of a mare after being a year barren is generally stronger and presumably better than on her becoming with foal while suckling. In fact, if left a twelvemonth barren, mares, I am informed by competent men, are stinted with great difficulty.

The late Mr Blenkiron, a well-known breeder of race-horses at Middle Park, kindly looked over this note, and he told me that, although this happens, mares often require some little management "to show to a horse, although in season," and it is necessary to put the twich on the nose to distract their attention, otherwise their affection for the foal induces them "not to show to the horse, although in season."

ć.

paratively rare, and that sensual feelings in the man become gradually sobered down.

It is a curious fact that man and a few domesticated animals are alone liable to suffer from the effects of sexual excesses. In a state of nature wild female animals will not allow the approach of the male except when in a state of rut, and this occurs at long intervals and only at certain seasons of the year. The human female probably would not differ much in this respect from the wild animal, had she not been civilised, for as I shall have occasion again and again to remark, she would not for her own gratification allow sexual congress except at certain periods. The courtezan who makes a livelihood by her person may be toujours pres, but not so the pregnant wife or nursing mother. Love for her husband and a wish to gratify his passion, and in some women the knowledge that they would be deserted for courtezans if they did not waive their own inclinations may induce the indifferent. the passionless, to admit the embraces of their husbands. These are truths about which much ignorance and consequently much false reasoning prevails. No portion of my book has more surprised unmarried men than such statements as these. Married men, however, generally confirm my opinion, and not a few have acknowledged that had wives been but judicious and consulted more the feelings of their husbands, the Divorce Court would not have been so often appealed to, nor would women have had cause to complain of there being so many unfaithful husbands.

Besides this kind of natural protection against excesses, arising from the periodical unwillingness of the human female to permit congress, we find that there is not in men, particularly in the intellectual and civilised man, any need for or natural impulse towards that excessive periodical indulgence which we notice in the brute creation. The human male is naturally prepared to copulate at all times of the year; he is not, therefore, instinctively required to repeat the act so many times within a short period, as some domesticated animals are, for the purpose of propagating the species. The ram has been supposed to repeat the act from fifty to eighty times in the course of one night. The stallion is, or rather ought to be, always limited to a certain number of

¹ This statement has been doubted. It is founded on the hypothesis, perhaps somewhat loose, that the chest and abdomen of a ram having been covered with "ruddle" over night, and the haunches of fifty ewes found smeared with the same composition in the morning, the animal had to such a numerical extent exercised his generative functions. This may or may not be a sequitur; but no manner of doubt exists that the sexual power of the animal is, in fact, as well as proverbially, very considerable; but let it be recollected that it is exercised only for a very short time during the twelve months.

² The late Mr Grey, who had the management of a large breeding establishment at Theobalds, told me that the celebrated stallion "Teddington," who was then

mares, but as he takes his mounts during a limited time (two or three months), the act is necessarily repeated very often, and at very short intervals.

Of course, these enormous copulative powers are not only not examples, but positive contrasts to what should obtain in the human being. As man has no real rutting season (which in animals appears to be a kind of periodic puberty), there is no occasion, and therefore no provision, for the sudden or excessive employment of his reproductive organs, and consequently any such excesses will be fraught with much danger. The brute, moreover, is deficient in the intellectual qualities of man: propagation of his species appears to be about the most important of the objects of his existence. Man is formed for higher purposes than this. To devote the whole energy of his nature to sensual indulgence is literally to degrade himself to the level of a brute, and to impair or totally destroy those intellectual and moral capacities which distinguish him from the inferior creation. Even in the lower animals a limit is placed to sexual indulgence, and we find in some cases very curious physical provisions for attaining this end.

Among the preparations in the College of Surgeons' Museum may be seen the penis of the young tom-cat. It is described by Owen in the catalogue as "penis of a cat, showing the retroverted callous papillæ of the glans," and it is covered with spinous-looking elevations, which, in connection, must give the female much pain. They disappear in the old tom. The same conformation, and to a much greater extent, exists in the guinea-pig. It is supposed that this rugous state of the male organ excites, if not anger, the greatest pain in the female.

Mr. Thompson, late Superintendent at the Zoological Gardens, corroborates the statement that in the feline race it is the female that makes the noise. He notices it as occurring constantly in leopards, tigers, lions, &c., and as presaging the conclusion of the sexual act. He agrees with me that the female requires to lend

serving mares at his farm, was limited by his owner to forty-five mares during the season, which lasts from February to July, but as it is desirable that mares should foal early in the year, the repeated acts of connection were included in a comparatively short period. In addition to this, the same mare is repeatedly (about every nine days) put to the horse, to secure impregnation. It appears, nevertheless, that these stallions do not suffer, and Mr Grey was of opinion that this number, forty-five, is not too much. In reply to my inquiries, he said that nothing but oats and hay are given to these horses; beans are considered to heat them. He seemed not to think that a horse can cover too much, but admits that he may too rapidly. He did not allow any horse in his establishment to mount more than twice a day. Two trials are generally advisable, as the first leap is often a failure. Country-travelling stallions are said to have stimulants given them, and to have as many as two hundred mounts in the season,

herself to the act, which is prolonged in this class of animals more than in some others in consequence of the position of her sexual organ.

To some such cause as this, I suppose, must be attributed the singular facts observed by Owen with regard to the copulation of spiders. He says-"The young and inexperienced male-always the smaller and weaker of the sexes—has been known to fall a victim, and pay the forfeit of his life for his too rash proposals. The more practised suitor advances with many precautions, carefully feels about with his long legs, his outstretched palpi much agitated. The female indicates acquiescence by raising her fore feet from the web, when the male rapidly advances; his palpi are extended to their utmost, and a drop of clear liquid is ejected from the tip of each clavate end, where it remains attached, the tips themselves immediately coming in contact with a transverse fleshy kind of teat or tubercle, protruded by the female from the base of the under side of the abdomen. After consummation the male is sometimes obliged to save himself by a precipitate retreat. The ordinary savage instincts of the female—etiam in amoribus sæva—are apt to return, and she has been known to sacrifice and devour her too-long tarrying or dallying spouse."

It should be remembered that different rules apply to different races. While the ram and the goat can copulate so frequently as to excite our astonishment, one copulative act seems among other creatures to satisfy all the requirements of nature for a very long period. Thus, for instance, in certain birds coitus is only requisite once in the season. In many parts of the country, where old women keep but one turkey hen, she is sent to the distant cock only once in the season, yet all the eggs laid during the year are fertile ones. In such cases all the eggs must be impregnated at once, or the spermatozoa be hoarded up in the cloaca till they are required.

Birds, I may here state, have no spermatheca, such as is found in the bee.

The bee is the example which at once suggests itself of one impregnation exhibiting the utmost limit of efficiency.

In the recent work of Siebold, translated by Dallas, entitled 'On the True Parthenogenesis in Moths and Bees,' a very interesting account is given of the act in the latter insects:

"It would appear that, whilst in the higher animals the male is the perfect and ruling creature—the bull keeps together, and, as it were, governs the herd of cattle, and the cock does the same by the hens—the reverse of this takes place in insects. In the wasps, hornets, humble bees, ants, and especially in the bees, the perfect female forms the central point, and holds the swarm together." (p. 40.) "Copulation never takes place in the hive. When the queen takes her wedding flight in fine warm weather, she makes her selection of a male bee (drone), and the act takes place

in the air. It is very quickly completed, whereas other insects may remain for days united in copulation. When the queen returns to the hive after this single copulative act, the external orifice of the sexual apparatus, which was kept closed before the wedding flight, stands open, and the torn male copulative organs remain sticking in the vagina, and partly protrude from it. This eunuchism, Siebold says, not unfrequently occurs in other insects, as in the beetles. In the particular case examined by Siebold, the seminal receptacle (spermatheca), which is empty in all virgin female insects, was in this queen filled to overflowing with spermatozoids.

"In the copulation of the queen the ovary is not impregnated, but this vesicle, or seminal receptacle, is penetrated or filled by the male semen. By this, much—nay, all—of what was enigmatical is solved, especially how the queen can lay fertile eggs in the early spring, when there are no males in the hive. The supply of semen received during copulation is sufficient for her whole life. The copulation takes place once for all. The queen then never flies out again, except when the whole colony removes. When she has begun to lay, we may without scruple cut off her wings, she will still remain fertile until her death. But in her youth every queen must have flown out at least once, because the fertilisation only takes place in the air; therefore no queen which has been lame in her wings from birth can ever be perfectly fertile. I say perfectly fertile, or capable of producing both sexes; for to lay drones' eggs, according to my experience, requires no fecundation at all." (p. 41.)

"After this single fecundation a queen bee can for a long time (four or five years) lay male or female eggs at will; for by filling her seminal receptacle with male semen she has acquired the power of producing female eggs; whilst before copulation, and with an empty seminal capsule, and therefore in the virgin state, she can only lay male eggs." (p. 53.)

The possibility of the semen thus lying in the spermatheca is a fact of great significance and importance, and illustrates the fact that seminal animalcules will live and thrive in the upper portion of the vagina long after they have been emitted from the testes.

Nature has, however, not only given the adult animal these instincts, but provides in a most wonderful way for their gratification.

SEXUAL ATTRACTION.—The devices, so to speak, which nature employs to bring the sexes together, are among the most interesting facts of zoology. No one can fail to notice the wonderful design evinced in bringing the sexes together by means of a phosphorescent light, as in the case with luminous insects. "The glowworm (Lampyris noctiluca) is an animal resembling a caterpillar; its light proceeds from a pale-coloured patch, that terminates the under side of the abdomen. It is, indeed, the perfect female of a winged beetle, from which it is altogether so different that nothing but actual observation could have inferred the fact of their being the different sexes of the same insect. The object of the light appears to be to attract the male, since it is most brilliant in the female, and in some species, if not all, is present only in the season when the sexes are destined to meet, and strikingly more vivid at the very moment when the meeting takes place. The torch which the wingless female,

doomed to crawl upon the grass, lights up at the approach of night, is a beacon which unerringly guides the vagrant male to her 'lone illumined form,' however obscure the place of her abode." The cause of this light is doubtless phosphorus, and we have reason to suppose that this is expended to a great extent in the act of copulation.

MARITAL DUTIES.—As I have advised continence, absolute and entire, for the young and the unmarried, so not the less urgently would I impress on the married the duty, for their own sakes, of moderation in sexual indulgence.

None, perhaps, but medical men can know at all (and they can know but a fraction of) the misery and suffering caused by ill-regulated desires and extravagant indulgences among married people. (See Marital Excesses, at page 191.)

Antiquity was sensible of the expediency of regulating to some extent these indulgences. Many ordinances existed among ancient nations for the purpose, of which I will give a few examples.

The following is a freely translated extract from the 'Uxor Hebraica' of John Selden, lib. iii, cap. 6 (in his works, ed. 1646, vol. ii, pp. 717-720):

"They would have the conjugal debt paid regularly by the husband in proportion to the energy unused in his avocation. According to the Misna, a man was allowed one or two weeks' leave of absence on the score of a religious vow of abstinence. Law students were exempt. A weekly debt was forced upon artificers, but a daily one upon vigorous young husbands having no occupation. Donkey-drivers (employed in transport of merchandise, &c.) were liable once a week; camel-drivers (a calling entailing much labour and travelling) once in thirty days; sailors once (at any time) in six months. This is according to the Rabbi Eliezer."

Solon required three payments a month, without reference to the husband's avocations.

Mottray states in his 'Travels,' vol. i, p. 250, that the Turkish law obliges husbands to cohabit with their wives once a week, and that if they neglect to do so, the wife can lodge a complaint before a magistrate.

My own opinion is that, taking hard-worked intellectual married men residing in London as the type, sexual congress had better not take place more frequently than once in seven or ten days; and when my opinion is asked by patients whose natural desires are strong, I advise those wishing to control their passions to indulge in intercourse twice on the same night. I have noticed that in many persons a single intercourse does not effectually empty the vasa differentia, and that within the next twenty-four hours strong sexual feelings again arise;

¹ Kirby and Spence, vol. ii, p. 420.

whereas, if sexual intercourse is repeated on the same night, the patient is able to so restrain his feelings that ten days or a fortnight may elapse without the recurrence of desire. The advantage of a second emission may be further considered with reference to statements on page 91, where I notice the probability that one vas deferens is only emptied at each emission. I believe the non-observance of some such rule as this is a very frequent cause of sterility in the female, as the spermatozoa are not fully formed.

The reader will remark that I specially desire to confine my remarks to hard-worked, intellectual married men residing in London, and every year's experience teaches me that I have done well in thus limiting my remarks to the denizens of large cities. No one, perhaps, more than myself is aware that strong muscular countrymen, who have no eccupation or mental drain on their systems, may and do follow out a very different course, without any apparent detriment to the system. On the other hand, I could point to the case of many a married man suffering from derangement of health solely, or at all events mainly, attributable to unsuspected sexual excesses, the best proof of which is that the health becomes restored as soon as the excesses are left off.

No one can deny that an enormous expenditure of semen can take place in men as well as in animals, but I believe medical men themselves have only recently become aware of the amount of ill-health and debility which follows the lavish waste of the seminal fluid in those who, so to speak, cannot afford it. In my own experience I have met with many persons who, as they look back to their past career, regret that ignorance of nature's laws induced them to overstep the bounds of prudence, and now attribute many of their ailments to sexual excesses continued for a long period in ignorance that they were excesses at all." ¹

It should not be forgotten that excess, even among married people, should be guarded against from higher motives than mere prudence. On this view of the subject I will quote from Bishop Jeremy Taylor's 'Rule and Exercises of Holy Living;' in the chapter entitled "Rules for Married Persons, or Matrimonial Chastity," he says:

"In their permissions and license, they must be sure to observe the order of nature and the ends of God. He is an ill husband that uses his wife as a man treats a harlot, having no other end but pleasure. Concerning which our best rule is, that although in this, as in eating and drinking, there is an appetite to be satisfied, which cannot be done without pleasing that desire, yet since that desire and satisfaction was intended by nature for other ends, they should never be separate from those ends,

¹ See further observations in chapter on Marital Excesses at page 191.

but always be joined with all or one of these ends, with a desire of children, or to avoid fornication, or to lighten and ease the cares and sadnesses of household affairs, or to endear each other; but never with a purpose, either in act or desire, to separate the sensuality from these ends which hallow it.

"Married persons must keep such modesty and decency of treating each other that they never force themselves into high and violent lusts with arts and misbecoming devices; always remembering that those mixtures are most innocent which are most simple and most natural, most orderly and most safe. It is the duty of matrimonial chastity to be restrained and temperate in the use of their lawful pleasures; concerning which, although no universal rule can antecedently be given to all persons, any more than to all bodies one proportion of meat and drink, yet married persons are to estimate the degree of their license according to the following proportions.-1. That it be moderate, so as to consist with health. 2. That it be so ordered as not to be too expensive of time, that precious opportunity of working out our salvation. 3. That, when duty is demanded, it be always paid (so far as in our powers and election) according to the foregoing measures. 4. That it be with a temperate affection, without violent transporting desires or too sensual applications. Concerning which a man is to make judgment by proportion to other actions and the severities of his religion, and the sentences of sober and wise persons, always remembering that marriage is a provision for supply of the natural necessities of the body, not for the artificial and procured appetites of the mind. And it is a sad truth that many married persons, thinking that the floodgates of liberty are set wide open, without measures or restraints (so they sail in the channel), have felt the final rewards of intemperance and lust by their unlawful using of lawful permissions. Only let each of them be temperate, and both of them be modest. Socrates was wont to say that those women to whom nature hath not been indulgent in good features and colours should make it up themselves with excellent manners, and those who were beautiful and comely should be careful that so fair a body be not polluted with unhandsome usages. To which Plutarch adds, that a wife, if she be unhandsome, should consider how extremely ugly she should be if she wanted modesty; but if she be handsome, let her think how gracious that beauty would be if she superadds chastity." (P. 70, Bell and Daldy edition, 1857.)

Let me add the advice of a still older writer, who, on these subjects, amid much quaintness has many most sound and excellent remarks—Chaucer.

"And for that many a man," he says," "weeneth he may not sinne for no lecherousness that he doth with his wife, certes that opinion is false; God wot a man may slay himself with his own knife, and make himself drunk with his own tun. Man should love his wife by discretion—patiently and temperately.

"Then shall man understand that for three things a man and his wife may fleshly assemble (come together). The first is in intent of engendure of children to the service of God—for certes that is the cause final of matrimony. The second cause is to yield every of them his debt unto other of his body, for neither of them has power of his own body. The third is to eschew lechery and villany. The fourth forsooth is deadly sin. . . . Understand that if they assemble only for amorous love, and for none of the foresaid causes, but for to accomplish that burning delight, they reck never how oft, soothly, it is deadly sin; and yet, with sorrow, some folk will more pain them for to do, than to their appetite sufficeth." ('Chaucer's Canterbury Tales,' "The Parson's Tale.")

CHAP. V.—MARITAL EXCESSES

It is a common notion among the public, and even among professional men, that the word excess chiefly applies to illicit sexual connec-Of course, whether extravagant in degree or not, all such connection is, from one point of view, an excess. But any warning against sexual dangers would be very incomplete if it did not extend to the excesses too often committed by married persons in ignorance of their ill-effects. Too frequent emission of the life-giving fluid, and too frequent sexual excitement of the nervous system, are, as we have seen, in themselves most destructive. The result is the same within the marriage bond as without it. The married man who thinks that, because he is a married man, he can commit no excess, however often the act of sexual congress is repeated, will suffer as certainly and as seriously as the unmarried debauchee who acts on the same principle in his indulgences—perhaps more certainly, from his very ignorance, and from his not taking those precautions and following those rules which a career of vice is apt to teach the sensualist. Many a man has, until his marriage, lived a most continent life;—so has his wife. As soon as they are wedded, intercourse is indulged in night after night; neither party having any idea that these repeated sexual acts are excesses, which the system of neither can with impunity bear, and which to the delicate man, at least, is occasionally absolute ruin. The practice is continued till health is impaired, sometimes permanently; and when a patient is at last obliged to seek medical advice, his usual surgeon may have no idea or suspicion of the excess, and treat the symptom without recommending the removal of the cause, namely the sexual excess; hence it is that the patient experiences no relief for the indigestion, lowness of spirits, or general debility from which he may be suffering. If, however, the patient comes under the care of a medical man in the habit of treating such cases, the invalid is thunderstruck at learning that his sufferings arise from excesses unwittingly committed. Married people often appear to think that connection may be repeated just as regularly and almost as often as their meals. Till they are told of the danger, the idea never enters their heads that they have been guilty of great and almost criminal excess; nor is this to be wondered at, since the possibility of such a cause of disease is seldom hinted at.

Some years ago a young man called on me, complaining that he was unequal to sexual congress, and was suffering from spermatorrhoea, the result, he said, of self-abuse. He was cauterised, and I lost sight of him for some time, and when he returned he came complaining that

he was scarcely able to move alone. His mind had become enfeebled, there was great pain in the back, and he wished me to repeat the operation.

On cross-examining the patient, I found that after the previous cauterization he had recovered his powers, and, having subsequently married, had been in the habit of indulging in connection (ever since I had seen him, two years previously) three times a week, without any idea that he was committing an excess, or that his present weakness could depend upon this cause. The above is far from being an isolated instance of men who, having been reduced by former excesses, still imagine themselves equal to any excitement, and when their powers are recruited, to any expenditure of vital force. Some go so far as to believe that indulgence may increase these powers, just as gymnastic exercises augment the force of the muscles. This is a popular error, and requires correction. Such patients should be told that the shock on the system, each time connection is indulged in, is very powerful, and that the expenditure of seminal fluid must be particularly injurious to organs previously debilitated. It is by this and similar excesses that premature old age and debility of the generative organs is brought on.

A few months later I again saw this young man, and all his symptoms had improved under moderated indulgence, care, and tonics.

In 1856, a gentleman, twenty-three years of age, who had been married two years, came to me in great alarm, complaining that he was nervous, and unable to manage his affairs. There was pain in his back, the least exertion caused him to perspire, and he had a most careworn countenance. I may further mention that he had been highly scrofulous as a boy. I learnt that he had married a young wife, and fearing that he might be considered a Joseph, as he had never known woman beforehand (although he acknowledged to having been guilty of evil practices at school), he unconsciously fell into excess, and attempted connection nightly; latterly, erection had been deficient, emission was attended with difficulty, and he felt himself daily less able to discharge what he thought were his family duties. Having read my book, he came to me for relief, and was extremely surprised at finding that I considered he had committed excesses, believing that after marriage frequent intercourse could not be so termed. This history was given with such a naïf air, that I was obliged to yield implicit credence to it. I desired him to put a check on his sexual feelings, and as a remedial measure ordered him phosphorus.

In December, 1861, a stout, florid man, about forty-five years of age, was sent to me by a distinguished provincial practitioner, in consequence of his sexual powers failing him, and one of his testes being smaller than the other. On cross-examination I found that he had

been married some years, and had a family. Connection had been indulged in very freely, when, about four years ago, a feeling of nervousness insensibly came over him, and about the same time his sexual powers gradually became impaired. The real object, he avowed, which he had in coming to me was to obtain some stimulus to increase his sexual powers, rather than to gain relief for the nervousness and debility under which he was labouring. Indeed, at his own request, the efforts of the country practitioner had been made in the former direction. Instead of giving remedies to excite, I told him that his convalescence must depend upon moderate indulgence, and allowing the system time to rally, and treated him accordingly.

The lengths to which some married people carry excesses is perfectly astonishing. I lately saw a married medical man who told me that for the previous fourteen years, he believed, he had never allowed a night to pass without having had connection, and it was only lately, on reading my book, that he had attributed his present ailments to marital excesses. The contrast between such a case as this, where an individual for fourteen years has resisted this drain on the system, and that of a man who is, as many are, prostrated for twenty-four hours by one nocturnal emission, is most striking. This great disparity is further discussed at p. 110. All experience however, shows that, whatever may be the condition of the nervous system, as regards sexual indulgences, excesess will sooner or later tell upon any frame, and can never be indulged in with impunity. I believe general debility and impaired health dependent upon too frequent sexual relations to be much more common than is generally supposed, and that they are hardly yet sufficiently appreciated by the profession as very fruitful causes of ill-health.

I will give one more instance. A medical man called on me, saying he found himself suffering from spermatorrhea. There were general debility, inaptitude to work, and disinclination for sexual intercourse; in fact, he thought he was losing his senses and the sight of one eye was affected. The only way in which he lost semen was, as he thought, by slight occasional oozing from the penis. I asked him at once if he had ever committed excesses. As a boy, he acknowledged having abused himself, but he married seven years previously to his visit to me, being then a hearty, healthy man, and it was only lately that he had been complaining. In answer to my further inquiry, he stated that since his marriage he had had connection two or three times a week, and often more than once a night. This one fact, I was obliged to tell him, sufficiently accounted for all his troubles. The symptoms he complained of were similar to those we find in boys who abuse themselves. It is true that it may take years to impair the health of some exceptionally strong men, just as it may be a long time before some boys are prejudicially influenced, but the ill effects of excesses are sooner or later sure to follow.

Since my attention has been particularly called to this class of ailments, I feel confident that many of the forms of indigestion, general ill-health, hypochondriasis, &c., so often met with in adults, depend upon sexual excesses. The directors of hydropathic establishments must probably hold some such opinions, or they would not have thought it expedient to separate married patients when they are undergoing the water treatment. That this cause of illness is not more widely acknowledged and acted on, arises from the natural delicacy which medical men must feel in putting such questions to their patients as are necessary to elicit the facts.

I have often been surprised at the immediate and manifest benefit produced in these cases by enjoining moderate indulgence or complete abstinence, together with the local treatment previously detailed under the head of Spermatorrhæa (p. 161), when other remedies in the hands of other practitioners had entirely failed.

It may very naturally be asked, what is meant by an excess in sexual indulgence? The simple reply is, the same as in any other indulgence. An excess is what injures health. I have at page 188 stated that, according to my experience, few hard-working intellectual married men should indulge in connection oftener than once in seven or perhaps ten days. This, however, is only a guide for strong, healthy men. Generally, I should say that an individual may consider he has committed an excess when coitus is succeeded by languor, depression of spirits, and malaise. This is the safest definition! Such results should not tappen if the male be in good health and indulge his sexual desires moderately.

No invariable law can be laid down in a case where so much must depend upon temperament, age, climate, and other circumstances, as well as the health and strength of both parties. I maintain that in highly civilised communities the continuance of a high degree of bodily and mental vigour is inconsistent with more than a very moderate indulgence in sexual intercourse. The still higher principle also holds good that man was not created only to indulge his sexual appetites, and that he should subordinate them to his other duties.

It is not the body alone which suffers from excesses committed in married life. Experience every day convinces me that much of the languor of mind, confusion of ideas, and inability to control the thoughts of which some married men complain, arises from this cause. These ill effects are noticed not unfrequently in patients who have married late in life, and still more often in persons who have married a second time after having been widowers for some years.

CELIBACY 195

The ill effects of marital excesses are not confined to the offending parties. No doubt can exist that many of the obscure cases of sickly children born of apparently healthy parents arise from this cause, and this is borne out by investigations amongst animals.

M. Goddard has related some interesting experiments made at the Haras of Poitou on the liquid ejaculated by stallions in their different jumps on the same day. He has established that the semen, which was tolerably thick and very opaline, of an amber colour, in the first jump, became more and more clear, and less and less thick, so that after the fourth jump the liquid was absolutely like water, and scarcely contained any animalcules. It was thus easy by the eye alone to distinguish the semen ejaculated by the same animal at different times of the day. According to the same observer, the semen of the first jump of a morning would possess alone certain fecundating properties, and in a covering establishment it would be advantageous to allow the same animal only one jump a day; one jump every second day would be even preferable. By acting in this way the owner would obtain a better result than by obliging stallions to jump four or five times in the twenty-four hours.—'Traité de Physiologie Longet,' p. 779.

I have no similar experiments to quote in regard to the human male, but I have little doubt that similar results would be observed were the semen examined in persons accustomed to marital excesses. Those, therefore, who are desirous of procreating healthy offspring will do well to bear this advice of mine in mind, and the result will show that the advantages of self-restraint are much more marked than are generally supposed.

CHAP. VI.—CELIBACY

The term "celibacy" should mean continence enforced on one who is of a fit age to marry. Continence in mere boys and very young men is not what we are now speaking of. After what has preceded I shall take it for granted that every rational person must be an advocate for celibacy, or rather, the strictest continence (p. 15), in the very young, and ready to admit that with a view to the full development of their being they should not only physically abstain, but so exercise their wills as not to allow their thoughts to dwell on sensual matters.

I believe I have already mentioned the fact that in children, precocious and strong sexual desires are often accompanied by and produce a dull intellect, and in the adult it is similarly found that the inordinate exercise of the sexual organs frequently annihilates the intellectual faculties. It is an undoubted fact that we meet with a

large proportion of unmarried men among the intellectual, and some of the ablest works have been written by bachelors. Newton and Pitt were single, Kant disliked women. "They do best," says Bacon, "who, if they cannot but admit love, yet make it keep quarter, and sever it wholly from their serious affairs and actions of life; for if it check once with business, it troubleth men's fortunes and maketh men that they can no ways be true to their own ends."

It was doubtless from such considerations as these that our ancestors ordained that college fellows at the universities should remain single. Similar reasons probably had their influence in inducing the church of Rome to prescribe that their priests should take vows of celibacy.

Whether or not the Roman Catholic priest continues celibate may not much interest the English public; but whether college fellows at the universities should be allowed to marry, has occupied a good deal of attention during the last few years.

As to that chaste form of continence, celibacy, which is practised by a certain number of both sexes under the dominion of ideas which are of the highest order, it is undisputed that this voluntary paralysis of the reproductive organs protects the individual from the greater part of the affections that I have described as mainly occasioned by inordinate and too early exercise of the generative organs.

In former editions of this work I asserted that in the adult the intellectual qualities are usually in an inverse ratio to the sexual appetite.

It has been pointed out to me that there are so many exceptions to this rule, that I have thought it necessary to modify the language in which I have expressed my views. I maintain that debauchery weakens the intellect and debases the mental powers, and I reassert my opinion that if a man observes strict continence in thought as well as deed, and is gifted with ordinary intelligence, he is more likely to distinguish himself in liberal pursuits than one who lives incontinently, whether in the way of fornication or by committing marital excesses. The strictest continence, therefore, in the unmarried, and very moderate sexual indulgence in the married state, best befit any one engaged in serious studies. In making this statement, however, I am bound to admit that in practice we meet with a large number of young men of more than average abilities, but of a delicate constitution, who cannot remain continent without becoming subject to

¹ Bergeret says, "As physician during many years to religious societies I have never seen serious affections of the organs of generation in these communities."

[&]quot;Continent celibacy, however, produces on the health other consequences not less severe, particularly in women; here the annihilation of the grand functions of maternity causes its victim to become phthisical."

CELIBACY 197

frequent nocturnal emissions. When this is the case, the sufferer may be intellectually in a worse plight than if he were married, and so occasionally indulged in sexual intercourse. In these exceptional instances it is not true that celibacy is the state best adapted to intellectual excellence. Of this I have had satisfactory evidence year by year. Numbers of men studying at the universities come to me complaining that, although living a continent life, they have become so troubled by emissions that they are unable to pursue for any length of time hard or continuous intellectual work; their memories fail them, and their health becomes impaired. Under appropriate treatment the constitution rallies, and the intellectual powers are restored. From these and other cases that come under the care of the medical practitioner, it appears that celibacy in the adult is not unattended with danger to exceptional temperaments. These dangers, however, it should never be forgotten, very seldom attend perfect continence. It will be generally found that they are merely the penalty of past indulgences. Robust, energetic men are seldom troubled in this way—at least without some fault of their own. In all such cases incontinence is not the remedy that should be recommended, but gymnastic exercise, appropriate diet, and such measures as improve the health. It is, as we have seen (p. 28), the almost universal rule that all men, old and young, who have led a continent life, so long as they continue to give themselves up to study, and take proper exercise, will not be troubled with strong sexual desires. Nevertheless, when any period of temporary idleness suspends the celibate's regular work, the sexual feeling will often reappear with redoubled force, and then real distress and often illness may ensue. Self-control is followed by nocturnal emissions, which may so increase in frequency as seriously to impair the health, while the evil results—due as I maintain to the inordinate loss of the vital fluid, semen—are attributed to previous hard work. The patient is supposed to labour under indigestion, heart disease, or general debility, and is ineffectually treated for them, whereas the medical man, instead of treating symptoms, should at once proceed resolutely to check the emissions—the cause of the ailment.

It has been my duty to investigate the causes of several instances of clerical scandal, and I have reason for believing that the seeds of a vicious life may have been sown in days when a man, prevented from marriage either by lack of means or by holding a celibate fellowship or by any similiar cause, and being in a state of idleness with no incentive to exertion, has been led away by his passions to indulge in a course of illicit intercourse, which he might have excaped if, like others, he could have married.¹

¹ Bergeret thus speaks of celibacy:—"Is celibacy a sure refuge from all chances of disease? No! celibacy leading to illegitimate unions, to debauchery, and the

Admitting, then, as I do that celibacy is attended with many draw-backs and temptations, and much sexual and mental suffering, I still consider that it is the necessary condition of the young, while in the adult, although it is in many instances attended with some inconveniences, that these may be obviated, or at all events sensibly relieved, by due medical supervision. Unmarried men who intend to lead a celibate life must not believe that they can do so if they indiscriminately indulge in the pleasures of the table; for them abstemious diet, and regular and almost exhausting exercise under proper medical supervision, are absolutely essential, and so assisted, they may with impunity to themselves, and with advantage to society, continue to lead a celibate life.

CHAP. VII.—EARLY BETROTHALS.—LONG ENGAGEMENTS

In a work entitled 'A Fraternal Address to Young Men,' issued by the Young Men's Christian Association, early engagement is recommended. The author says, p. 52:—"Let the affections be engaged, and the prospect of marriage occupy the mind. If such betrothal be truthful and preserved in fidelity many advantages beyond those already hinted at would be enjoyed."

This opinion has been entertained by many excellent men; but if we examine it from a medical point of view, it is very doubtful, to say no more, whether it is desirable for any youth, who has his way to make in the world, to attach himself to a girl early in life, however purely and faithfully. If an adult is in a position to marry, by all means let him do so. If his sexual desires are strong, the power of the will deficient, and his intellectual faculties not great, early marriage will keep him out of much mischief and temptation. All medical experience, however, proves that for any one, especially a young and susceptible man, to enter into a long engagement without any immediate hope of fulfilling it, is physically an almost unmitigated evil. It is bad for any one to be tormented with sexual ideas and ungratified desires year after year. The frequent correspondence and interviews cause a morbid dwelling upon thoughts which it would be well to banish altogether from the mind; and I have reason to know that this condition of almost constant excitement has often caused not only dangerously frequent and long-continued nocturnal emissions, but most painful affections of the testes. These results sometimes follow the progress of ordinary courtships to an alarming extent. The

libertinage of bachelors, presents more inconveniences than that which exists among married people." (See 'Annales d'Hygiene,' tom. xx, iv, p. 34.)

danger and distress may be much more serious when the marriage is postponed for years.

I am aware that to the more romantic of my readers these warnings may be very distasteful. Their idea of love is that it is a feeling too pure and spiritual to be defiled with any earthly alloy. I confess that I doubt whether any but the inexperienced really entertain this notion. During the first passionate delight of an attachment, no doubt, the lower and more mundane feelings are ignored. But they are present, nevertheless; and according to my professional experience, are tolerably certain to be aroused in every case, sooner or later. Of course, where the affection felt is true and loyal, they may be corrected and kept within the strictest bounds of the most respectful tenderness; to do this, however, in the case of a protracted engagement is a far harder task than the ardent and poetical lover allows himself at first to think.

The suffering caused by the repression of continually excited feelings that cannot be gratified, is often very great.

I am very far from wishing to degrade love to the level of mere animal passion; on the contrary, it should be a true and deep union of the whole nature, every part taking in this, as in all other matters, its own place. To ignore the bodily and secular aspect of it, however, would be as false and unwise, though not so degrading, as to forget the mental and spiritual.

It is, indeed, more than false and unwise, it is dangerous. Experience too often proves that what has commenced as a pure and most refined attachment may end very differently, if not most carefully guided. And this guidance, as I have said, may involve much trouble-some and almost dangerous distress.

Continence from all sexual excitement in thought and deed is my advice to all young men; and even the adult, who is not in a position to marry, had better divert his thoughts from sexual matters as much as possible. It is wiser for him to devote himself altogether to his profession, instead of having to divide his attentions between a fiancée and his success in life. When the latter is attained, it will be time to think of the former. He will then be in a better position to select his partner for life.

Socially speaking, too, these long or early engagements often turn out badly. Hope deferred not only makes the heart sick, but the temper sour. Differences that the closer bond of marriage would have healed at once, or never allowed to arise, become permanent sources of disagreement, and very often the parties have to regret a youth that has been rendered less useful and less happy by an engagement which has at last to be broken off, after much suffering, to the mutual relief of both.

George Herbert says, in his 'Church Porch:'

"Wholly abstain, or wed—thy bounteous Lord Allows the choice of paths—take no by-ways, But gladly welcome what He doth afford, Not grudging that thy lust hath bounds and stays; Continence has its charms—weigh both, and so If rottenness have more, let heaven go."

In the case of young men, however, the rules above laid down apply with nearly equal force to early marriages. Lycurgus forbad any man to marry under the age of thirty—a state of celibacy probably well adapted to the times. As to early marriages I can only say that marriage, even for a young man, is better than fornication. But the true remedy, it cannot be too often repeated, for sexual distress in youth is a training to continence, not indulgence, even lawful. Those are in error who think that early marriages are advisable on the theory that there is no alternative.

After a pretty wide experience I should lay it down as a rule that marriage for the very young is not only not in any sense necessary, but is an evil, both from a medical and a social point of view.

No medical man, I hold, should ever recommend the hardly-worked metropolitan population to marry early. Marriage is not the panacea of all earthly woes, or the sole correction of all earthly vices. It often interferes with work and success in life, and its only result is, that the poor man (poor in a pecuniary point of view) never reaches the bodily health or social happiness he might otherwise have reasonably expected. Under the age of twenty-five, I have no scruple in enjoining perfect continence. The sighing lackadaiscal boy should be bidden to work, righteously and purely, and win his wife before he can hope to taste any of the happiness or benefits of married life.

THIRD DIVISION

IMPOTENCE

Impotence is the term commonly applied to a state of inability to consummate marriage, and to all those morbid conditions in man opposed to the physiological union of the two sexes, that is, coition. Such inability is most commonly due to some derangement or deficiency of either the erectile or the emitting forces.

I have not been altogether free from doubt whether the subject of impotence should not have been treated as a part of my second division, under the head of disorders of erection; but partly on account of its great importance, and partly that it has a sort of bifold nature, being from one aspect a result of disease, and from another an abnormal physical condition, I have determined to place it in a separate division by itself.

"True impotence," says Lallemand, "consists in want of power in connection, not once, but habitually; not only with courtesans, but with those whom we most love; not under unfavorable circumstances, but during long periods of time, say, five, fifteen, or twenty years, when married to lovely and handsome women, whose devotion to their husbands has never been questioned." (Vol. ii, p. 242.)

That this lamentable state of things truly exists there can be no doubt, and in London those whose attention is devoted to diseases of the reproductive organs occasionally meet with cases in which there appears to be complete annihilation of all the sexual feelings and actions, and in which the man is reduced to what Roubaud describes as generative syncope. Such instances, however, are rare. Usually it happens, at least in England, that the functional diseases requiring treatment consist in the absence of only one or more of the conditions necessary for coition. In the East, I am told, the Levantines are often utterly impotent before they arrive at the age of thirty. If report speaks correctly, Hien Fung, a recent Emperor of China, was in this condition.

The forms that impotence assumes are various, though the result is the same in all cases, viz. inability to perform the sexual act. Thus, a man may be utterly impotent whether he has or has not erection attendant on desire—again, there may be only a partial erection, lasting an insufficient length of time for penetration—or the erection may be so weak—or the emission so quick, as practically to render the man impotent—or a man may be impotent from emission not taking place at all—or emission may not occur until some time after connection has been attempted.

Causes.—I fear we must come to the conclusion that when there is desire, and merely a want of power, this state of things arises from abuse of the generative organs, aggravated in most instances by alarm, a guilty conscience, diffidence, habits of intemperance, or too free use of tobacco, from timidity, or from too frequent excitement without gratification.

The exact way in which these causes produce the effects of impotence is not certainly known, but it is most probably by occasioning lesions of the nervous system, which is under the influence of the sympathetic nerve or excito-motory system.

It is abundantly clear that this state is susceptible of many different degrees, and is induced by various and conflicting causes. I propose in the following chapter to inquire with more precision than has heretofore been attempted into the nature and character of impotence, and to indicate as accurately as possible the lines of demarcation between the curable and incurable forms.

Aptness for and desire of coition is the invariable condition of every young and healthy adult. Impotence is the term applied to the absence, whether temporary or permanent, of this condition. Considering the important issues dependent upon the presence or absence of virile power, it might be expected that the term indicating its absence would be the subject of very careful scientific analysis and exact definition. Strange to say, this is so far from being the case that I believe I may safely say that there is no term in the whole medical repertory more loosely used. In this term impotence as ordinarily used there are included disorders of the most opposite character. It is applied alike to cases of physical malformation, which preclude all possibility of intercourse, and to the various morbid conditions in man or woman which are opposed, without any apparent malformation, to the physiological union of the two sexes; in other words, general inability to consummate marriage, no matter from what cause, is loosely termed impotence. The careless application of this term to various states differing widely from each other, both in their origin and general characteristics, has given rise to great confusion of ideas. If the old nomenclature be adhered to, impotence will perhaps be best described under the two divisions:—1. Temporary or false impotence; 2. True impotence. It would, however, be more convenient to abstain from making identical in name things absolutely different in kind.

With the view, therefore, of marking off more accurately conditions which are susceptible of treatment from the one that is incurable, I shall adopt a different nomenclature to that hitherto in vogue. Aptness for and desire of coition, whether in esse or in posse I shall term virility, while as distinguished from impotence, or the absence of virility, I shall collect under the term of abeyance of virility, the various morbid conditions opposed to the physiological union of the two sexes. Under this latter general heading I may class sexual indifference or temporary absence of desire, absence or deficiency of power, and inability to consummate marriage.

SECT. I.—SEXUAL INDIFFERENCE, OR TEMPORARY ABSENCE OF DESIRE,

May again be subdivided into two heads: 1st. Where desire has never been felt; 2nd. Where desire once experienced has been lost. It may occur either among married men or unmarried, but is naturally more frequently met with among the latter, and to it I may, therefore, first call attention.

SEXUAL INDIFFERENCE AMONG SINGLE MEN.—This condition may arise from a variety of causes. We find, for instance, that some men reach adult age without having experienced any sexual desire at all. That complete sexual quiescence which we have noticed as being the proper condition of childhood continues in such cases during the period of youth, extending even into adult age.

In some it is only at an abnormally late period that the natural sexual desire commences; this delay in the development of the reproductive powers gives rise to a variety of surmises, but curiously enough the subject of the deficiency may be the last person surprised at the delay in the appearance of sexual feeling, and it is often only accidentally that a medical man is consulted about it at all.

I shall be told, and no doubt with some truth, that this continued sexual quiescence is a perfectly abnormal state of things; it is nevertheless one with which I am very familiar, and is far more frequently met with than is generally supposed. It occurs principally where the intellectual powers have been very highly cultivated or where the body has been subjected to strong and constant physical exertion. I have met with it alike in the very delicate and the very robust. Fat youths and stout young men often exhibit this peculiarity. A large class of men commonly supposed to be nervous, bashful, or timid, are in fact sufferers from this absence of sexual feeling, which may, perhaps, be due to their having been brought up in retired country places without any female companions. They can hardly be said to have lost that of which they had never had experience, or to have failed to exercise powers of whose very existence they are unconscious. Failure implies in the very term unsuccessful effort, and how can this be predicated of persons who have made no attempt at all? It would be obviously erroneous to conclude without further evidence that any individual of this class is in fact impotent, when all that can be said of him is that his life has been perfectly chaste, and undisturbed by the usual virile phenomenon.

It will be found that this class is again subdivided into—1st. Persons who have no wish to marry; 2nd. Persons who are afraid to marry. It is hardly too much to say that cases of absence of virility or true

impotence are furnished almost exclusively by the former subdivision. The desire to marry indicates the presence or, at all events, possibility of potency. I have frequently been consulted in the course of my practice by sufferers from the latter subdivision.

The following is a not unfrequent phase of this affection. A young man has been continent all his life. When his studies are completed, and his university career is drawing to a close, he forms an attachment which in every way is desirable, but he thinks he has reason to believe himself impotent. If occasionally subject to nocturnal emissions, or if on going to the water-closet or even after passing water some slightly tenacious fluid escapes, the youth imagines that these are signs of impotence, that his happiness is marred—that he is incapable of marriage. If, unfortunately, he has been guilty as a boy of self-abuse the conviction comes home to him that he deserves the personal chastisement inflicted on him; and with all the self-sacrifice of youth he deems himself unworthy to have a wife, and in a fit of despair proposes breaking off the engagement, declaring that whatever his own sufferings may be he never will sacrifice the happines of the woman whom he has selected to be his partner. It is well if such a man, in this despondent mood, consults a competent and judicious medical man. In too many instances pride, or his stricken conscience, or ignorance, or the fear of entrusting his secret to any human ear, brings about a state of mental and bodily prostration that must be seen to be appreciated. No one but those who have witnessed the condition of the sufferer can form any idea of the hell upon earth which these consciencestricken penitents carve out for themselves. I can testify to the enormous numbers that annually consult us, and well it is for them if they do not resort to the quacks. It is such sufferers as these that furnish funds for the advertising firms who fill the pages of some of our country and London journals with their trashy advertisements. These harpies fatten on the ignorance and prejudices of their patients. humour their fears, increasing and exaggerating the supposed symptoms, and only turning them adrift when they have emptied their pockets. If, however, a sympathetic and competent medical man be consulted, he can conscientiously inform such sufferers that a youth on first falling in love is often beset by these alarms, which I have classed under the symptoms of false impotence, and that a little sympathy on the part of the surgeon, with some confidence on the part of the patient, and the treatment recommended at page 32, will suffice to effect a cure, and to justify his being advised to marry. It is important and most satisfactory to the medical man to be able to say to such a patient, "Wait, and you will witness your sexual feeling recur with redoubled power, and care must be taken lest escapes follow the restoration,"

It is difficult for persons not engaged in actual practice, or who are not in the habit of seeing supposed impotent men, to credit how numerous is the class of those who, without adequate cause, believe themselves to be impotent. I now mention the following case which is similar to many others I see weekly. It was that of an officer in the army who after serving with great distinction came to me asking my opinion as to his fitness to marry. After subjecting him to treatment I sanctioned his marriage, but the day previous to the one fixed for the wedding, he returned to me in great alarm under the belief that he was utterly incompetent to perform his marital duties. He founded this opinion on a fancied want of sexual power indicated by absence of morning erections, occasional passing away of semen, and a dread of the consequences of failure. After hearing his statement I assured him of the needlessness of his alarm, and his subsequent experience coincided with the opinion I expressed.

I was lately attending another patient, an Indian of some rank, who consulted me for sexual debility. I treated and soon cured him; with my sanction he married, though not without certain misgivings on his part; he returned to me within a week after his marriage, stating that in his opinion, although partially successful, he had failed in consummating the marriage. I sent him back to his wife, and not having seen him since feel confident that he has proved himself an efficient husband. If this gentleman had married without first obtaining the benefit of medical advice, I have not the slightest doubt that his wife might have sought for and obtained a divorce on the ground of his impotence.

A distinguished artist once called on me to obtain my opinion as to whether he might marry. Over-work had apparently weakened his frame, and in the course of conversation he also told me that he had drawn much from the nude figure. He had acquired through constant practice such complete self-control that he suffered little from sexual excitement. He had become, a short time previously to his visit to me, attached to a very charming and intellectual lady, but hesitated to propose to her without my sanction, fearful lest he should be incompetent to fulfil his marital duties. I told him I had some doubt about the amount of assistance I could give him, as I was fully aware of the influence imagination exerts on the sexual organs. I did all I could firstly to improve his general health, enjoining him to exercise his brain less and his muscles more than he had previously been in the habit of doing. I forbade him to see the lady often, I cauterized the urethra, and finding that he rallied I gave my sanction to his marriage, and have every reason to believe that it was happily consummated.

Here, again, is an instance of partial impotence which must have become permanent had the patient neglected to consult a medical man. This want of self-confidence once established is very difficult to remove, and unless suitable measures are taken to remedy early this supposed inability, temporary impotence may assume a permanent form. I am convinced, however, that most of these forms of impotence are remediable if only early and proper treatment be pursued.

Long experience has completely satisfied me of the soundness of the principle here laid down, and I trust to see it more widely adopted than it has hitherto been by the medical profession generally. As will be seen hereafter, the confusion prevailing among those who should be better informed has extended to the courts of law, and I fear that in many cases decrees of nullity of marriage on the ground of impotence have been pronounced, when all that was wanting to supply the deficiency of power in the husband was proper advice and careful treatment. A long series of decisions have all tended towards settling the law on an erroneous footing, and it can only be placed on a satisfactory basis by the action of enlightened and concordant medical opinion. So convinced am I of the truth of the principle above enunciated that whenever I am consulted as to the advisability of contracting marriage, if I am unable to detect any signs of imperfect physical formation, and have no reason for suspecting that the powers have been unnaturally abused, I invariably urge the patient to marry, assuring him of his perfect competence to enter into the married state, and it is seldom that I do not find myself justified by the result. I could mention numerous instances of persons such as I have above described, marrying and becoming the fathers of large families. But of course such advice can only be given after the most careful analysis of the patient's condition.

Marriage has been classed among the remedies for the slighter affections of the sexual organs; and if I may credit the statements of patients, medical men, on being consulted, in the most off-hand manner, without inquiring into the particular symptoms or probable cause of the supposed impotency, at once say, "Oh! you are only nervous; go and get married—a wife will cure you!"

In the milder cases, and in instances where the patient only slightly suffers from too frequent nocturnal emissions,—but in other respects is in good health,—no advice can be better, and I am only too glad to corroborate it.

Amidst all the important questions, however, that come before a medical man, I know of none which require more tact and knowledge than this:—"Am I in a condition to marry?" On the one hand, you have, perhaps, the very timid, nervous individual, previously depicted in these pages, who may or may not have exaggerated his weaknesses until neither he nor his medical adviser can exactly say what is his condition. Often, even in the slighter cases, it requires all the knowledge

acquired by long practice to arrive at a just conclusion as to what is real, what fanciful, in a patient's narrative. It is, in short, most difficult to say, off-hand, in such cases, whether a man may or may not marry. From what I have already said, it will be seen that I am always disposed to take the sanguine view of the probabilities, not merely because it is a calamitous thing for an otherwise healthy adult to be told by a scientific man, unless on clear and sufficient grounds, that he is so far impotent that he should not marry, but because experience teaches me that the majority of adults are able to perform the sexual act.¹

Although a professional man may almost invariably give this favorable opinion, he should recollect that the very fact of its being thought worth while to consult him affords primâ facie evidence that the patient feels that something is amiss; and experience teaches me that the healthy adult does not ask the opinion of a medical man without having pretty good reason to suspect a deficiency of virile power. So convinced am I of this, that when a patient consults me on the advisability of marriage I enter fully into details, and inquire into his antecedents. I generally find that he is not only suffering from too frequent emissions, but also that his fears depend upon facts which he is not all at once ready to disclose. The result of these inquiries too often proves that the patient, although a continent man, goaded by his fears, has made one or two unsuccessful attempts at sexual intercourse.

The pleasure with which these patients receive the announcement that they may marry must be seen to be appreciated, yet they can hardly believe that the opinion is unbiassed. As I have said elsewhere, diffidence is a marked characteristic of these men, and they again and again ask, "Are you not taking too favorable a view of my case?" They display the most unselfish feelings, and assert that they could bear their own miserable state of existence, but entreat the surgeon not to sacrifice the woman. As I have said above, these are not for the most part cases of true impotence, and it would indeed be a grievous error on the part of a medical man to condemn such patients to a state of celibacy; and if the appropriate treatment described at page 32 be followed, in a

1 It not unfrequently happens that a young man, in consulting his doctor, appeals to his feelings, and says, "Tell me the worst; I am ready to hear the statement that I may not marry, but do not let me marry and repent of it, and make two people wretched—at present I have only myself to care for, and I could bear the worst opinion you can give of me." I may say that, after thirty years' experience, I have hardly ever found myself compelled to pronounce a young man, otherwise healthy, to be impotent who held such language as this. I can most conscientiously state that in nine cases out of ten such complainants are only diffident men, who belong to the susceptible class so often depicted in these pages. I may lay it down as a general rule that although, as I state in the text, there is generally some reason for the medical man being consulted, those who are anxious to marry may do so, at all events after proper treatment, without any dread of finding themselves impotent.

very short time a marked recovery may be observed, which surely progresses, until at length the patient becomes satisfied of his healthy condition. I am in the habit of assuring such sufferers that no one is more convinced than myself of the danger of recommending a man to marry who is physically unfit to do so. I fully agree in the truth of what the professor of Montpelier has nobly observed, "What has the young girl, who is thus sacrificed to an egotistical calculation, done, that she should be condemned to the existence that awaits her? Who has the right to regard her as a therapeutic agent, and to risk thus lightly her future prospects, her repose, and the happiness of the remainder of her life?

"Until a man has contracted these indissoluble bonds, impotence the most complete can compromise the future of no one.

"It is precisely because marriage is the most sacred bond for individuals, as well as the most important for society, and because an iron law renders it indissoluble, that it is rational as well as moral not to contract it without the certainty that it will be perfect and complete." (Vol. iii, p. 470.)

I can, however, affirm that in practice I have never known an instance of this sort of martyrdom where my sanction to a marriage has previously been asked and granted.

It often happens that when a medical man thinks it desirable for a patient to marry, his advice is frustrated by other considerations. In many cases, the patient is too young; in other instances, where sexual abuse has been indulged in, or nocturnal emission has been frequent, the dislike to marriage is such that every woman is alike distasteful to the sufferer, and we must first improve the patient's state of health.

Those nervous, hypochondriacal people who, from a bad conscience, a weak frame, the effects of depressed health, or some extravagant ideas of the possible requirements of the young lady, on a subject of which all well-brought-up English maidens are ignorant, fancy that they are unfit to undertake the rational duties of husbands and fathers, should be encouraged to marry and be happy.

I may further add my firm conviction that when the surgeon has improved the health of these self-accusing nervous men, nothing is so likely to establish a permanent cure, and therefore conduce to the happiness of individuals, as marriage. But it will be well for the medical man who thus advises marriage to impress on the patient the necessity of indulging in no form of excess. Organs that have been temporarily weakened require to be exercised with great moderation.

There are, however, other cases which do not admit of such ready solution, as the following instance shows:—A middle-aged man, with deep marks under each eye, came to ask me if he might marry. He

¹ See page 212 in corroboration of this statement.

was engaged to a person of about his own age, and they were mutually attached. He had abused himself early in life, but had never committed fornication, and, having read my book, was anxious to have medical sanction to his nuptials, as he doubted whether he ought to marry. Emissions, not very abundant, I found, took place once a week, and there were occasional erections in the morning. The testes were small and flaccid, although he had worn a varicocele ring; the penis was also small, being, as my patient stated, not large even when erection took place, so that all I could conscientiously do was to tell him that I had serious doubts as to the propriety of his marrying, but could not say positively that he ought not to marry. Unsatisfactory as such a dictum must always be, anything is better than the unjustifiable advice, putting aside its immorality, which some medical men are said to give to their patients, viz. to commit fornication in order to ascertain if they are competent to marry. I would earnestly insist that such a test is not only fallacious, but often most dangerous.1

¹ Since the last edition of this book was published a most unjustifiable attack has been made on the profession by Professor Newman, in the accusation that physicians of eminence recommend harlotry to their patients. The Emeritus Professor of University College, London, proceeds thus-"I am further informed by a younger friend, who in his boyhood (through erroneous judgment in his father) was forbidden ordinary boyish exercise, but was a very diligent student,—that, when quite a youth, he suffered from an excess of this depletion to which I have referred, and went to an eminent London physician for advice. The reply was shortly this: 'The only cure is intercourse with women. You are too young to marry. I cannot advise you to take the risk of the streets; but you ought to keep a mistress.' My friend, though then so young, was strongly religious, and revolted with horror from the thought.-After such information, I was unable to suppose this theory confined to the disreputable members of the profession. Besides I have in recent months received or seen letters from several ladies, bitterly complaining of the awful counsel given by doctors to young men, and deploring that so many women are overpowered by the doctors' authority, and settle down into the doleful, depressing belief that men must be immoral for their health's sake. As others put it, women under the doctors' teaching are coming to a universal disbelief in male chastity. Some mothers have had vehement contest against doctors, in the effort to save their sons from immoral courses. Further, an intimate friend of mine, whose age must be near fifty, now tells me, that in his youth he consulted an eminent London physician, who, though the ailment had no relation whatever to the sexual system, volunteered to say that it was bad for him to remain chaste; and, in reply to some exclamation of surprise, explained that 'he must judge for himself how to act: the question of morality did not belong to the physician; but, that a man must not expect to be in health, if he neglected to exercise a natural function." Mr. Newman goes on to say-"Different in basis, but equally formidable to morals, is the notion, that it is useless to struggle for the entire purity of young men; and that their temporary unchastity (of course at the expense of women) is to be counted on. On all sides, a despair of moral influences is deplorably prevalent. It must be disowned, and a strict moral practice demanded; else, more and more, we shall see fatal acquiescence in a most destructive vice. The European Continent gives us most awful warning. On the What, for instance, is more probable than that a nervous man, who, for the first time, meets a loose woman, goes to a strange house, and is frightened by the disgrace which may attend any exposure of his folly, should find himself unable to perform the act? The only greater misfortune that can befall him is to be deluded subsequently and consequently into consulting the advertising quacks. If he does not end his days in a lunatic asylum he will be singularly fortunate.

THE SECOND FORM of sexual indifference—temporary absence of desire, above referred to-namely, when desire, once experienced, has been lost, may now be noticed. It is a kind of temporary impotence proceeding from an easily assigned cause, which nevertheless often creates much anxiety. The student, who has previously experienced all the sexual desires common to his age, all at once, during some strenuous and long-continued mental exertion while he is absorbed in his studies, finds all sexual feeling annihilated. Men who are 'or have recently been reading hard at the universities frequently come to me complaining of absence of desire, which I am happy enough to prove to them is only temporary, and to be easily accounted for. It is undoubtedly true that such persons are temporarily impotent. Nature has wisely ordained that the secretion of the testes may be temporarily arrested. Whenever the brain is overtaxed, or any prolonged muscular exertion is taken, sexual desire may for the time cease; but it is quite certain that if the reproductive organs are healthy and have not been abused, sexual feelings and increased power will return as soon as the overtaxed brain or muscles are allowed to regain their normal condition.

SEXUAL INDIFFERENCE AMONG MARRIED MEN, as a temporary affection, is another cause of anxiety, which in some persons produces the greatest alarm; and well it may, because if instead of being properly treated, it be allowed to continue, it may, as will be seen further on at p. 240, lead to domestic differences, and even induce the wife to appeal to the Divorce Court for an order to annul the marriage.

whole, I find it impossible to resist the conviction, that in all ranks of the medical faculty there is at least a fraction (highly dangerous, if only a fraction), which actively preaches deadly immorality."—The Relation of Physiology to Sexual Morals, p. 23.

As these pages were passing through the press a very lamentable case came under my notice. An officer returned from India, and, attracted by the advertisement of a notorious quack, consulted him. After a great number of visits, intercourse with a woman of the town was recommended, and the first attempt was followed by chancre, and this by secondary symptoms. Before his victim escaped, the quack had obtained from him £1500. Fortunately for himself the patient sought other advice in time, and is now, I am happy to say, in a condition to perform his military duties efficiently.



Causes.—Men who gain their bread by the sweat of their brows or the exhausting labour of their brains, cannot be always ready to perform the sexual act. During certain periods, when occupied with other matters, a man's thoughts may dwell but little on sexual subjects, and no disposition exist to indulge anything but the favourite or absorbing pursuit, mental or physical, as the case may be. After a lapse of time, different in various individuals, sexual thoughts recur, and the man who yesterday was so indifferent to sexual feelings, as practically to be temporarily impotent, now becomes ardent and sexually disposed, remaining so until the necessary and, in fact, healthy lethargy of the organs, consequent on the performance of the act, has supervened.

This quiescent condition is much more persistent in some married men than in others. There are persons (married as well as single) who only at very infrequent intervals feel any disposition for sexual intercourse, just as there are others who never feel any such desire at all. Again, there are lethargic men who, unless roused, will hardly do anything. It requires an effort in some men to eat. There is in some of these cases undoubtedly great sexual debility. Again the habitual drinker cares little for sexual enjoyments. I am quite certain that some excessive smokers, if very young, never acquire, and if older, rapidly lose, any keen desire for connection. The pleasures of the table so monopolise many a man's thoughts that he is indifferent to all other indulgences. In all the above cases the sexual feelings occupy a secondary position, and offer a strong contrast to that tyrannous mastery from which the thorough voluptuary suffers. In the more advanced stages of this quiescent condition, it is often difficult to say whether the sexual organisation was originally weak, whether the other tastes have overpowered the sexual appetite, or whether the individual has not early in life abused his generative faculty.

Among the married we sometimes find men taking a dislike or even a disgust to their wives, and, as a consequence, there is an entire want of desire. A first failure will sometimes so annihilate men's sexual appetite that they are never able or anxious to attempt connection a second time. In many cases this arises from wounded amour propre, as they have succeeded with other women. Early excesses in married life, will, in a certain number of cases, occasionally produce a temporary impotency later in life. Want of sympathy or want of sexual feeling, on the woman's part, again, is not an unfrequent cause of apathy, indifference, or frigidity on the part of the husband. Lastly, there are cases of amiable men who carry their consideration for the women they love to such an extent as to render themselves practically impotent for very dread of inflicting pain.

Want of Sexual Feeling in the Female a Cause of Absence of Virility.

—We have already mentioned lack of sexual feeling in the female as not an uncommon cause of apparent or temporary impotence in the male. There is so much ignorance on the subject, and so many false ideas are current as to women's sexual condition, and are so productive of mischief, that I need offer no apology for giving here a plain statement that most medical men will corroborate.

I have taken pains to obtain and compare abundant evidence on this subject, and the result of my inquiries I may briefly epitomise as follows:-I should say that the majority of women (happily for society) are not very much troubled with sexual feeling of any kind. What men are habitually, women are only exceptionally. It is too true, I admit, as the Divorce Court shows, that there are some few women who have sexual desires so strong that they surpass those of men, and shock public feeling by their consequences. I admit, of course, the existence of sexual excitement terminating even in nymphomania, a form of insanity that those accustomed to visit lunatic asylums must be fully conversant with; but, with these sad exceptions, there can be no doubt that sexual feeling in the female is in the majority of cases in abeyance, and that it requires positive and considerable excitement to be roused to all; and even if roused (which in many instances it never can be) it is very moderate compared with that of the male. Many persons, and particularly young men, form their ideas of women's sensuous feeling from what they notice early in life among loose or, at least, low and immoral women. There is always a certain number of females who, though not ostensibly in the ranks of prostitutes, make a kind of a trade of a pretty face. They are fond of admiration, they like to attract the attention of those immediately above them. Any susceptible boy is easily led to believe, whether he is altogether overcome by the syren or not, that she, and therefore all women, must have at least as strong passions as himself. Such women, however, give a very false idea of the condition of female sexual feeling in general. Association with the loose women of the London streets in casinos and other immoral haunts (who, if they have not sexual feeling, counterfeit it so well that the novice does not suspect but that it is genuine), seems to corroborate such an impres-

I shall probably have no other opportunity of noticing that, as excision of the clitoris has been recommended for the cure of this complaint, Köbelt thinks that it would not be necessary to remove the whole of the clitoris in nymphomania, the same results (that is destruction of venereal desire) would follow if the glans clitoridis had been alone removed, as it is now considered that it is the glans alone in which the sensitive nerves expand. This view I do not agree with, as I have already stated with regard to the analogous structure of the penis, p. 180. I am fully convinced that in many women there is no special sexual sensation in the clitoris, and I am as positive that the special sensibility dependent on the erectile tissue exists in several portions of the vaginal canal.

sion, and as I have stated above, it is from these erroneous notions that so many unmarried men imagine that the marital duties they will have to undertake are beyond their exhausted strength, and from this reason dread and avoid marriage.

Married men—medical men—or married women themselves, would, if appealed to, tell a very different tale, and vindicate female nature from the vile aspersions cast on it by the abandoned conduct and ungoverned lusts of a few of its worst examples.

I am ready to maintain that there are many females who never feel any sexual excitement whatever. Others, again, immediately after each period, do become, to a limited degree, capable of experiencing it; but this capacity is often temporary, and may entirely cease till the next menstrual period. Many of the best mothers, wives, and managers of households, know little of or are careless about sexual indulgences. Love of home, of children, and of domestic duties are the only passions they feel.¹

As a general rule, a modest woman seldom desires any sexual gratification for herself. She submits to her husband's embraces, but principally to gratify him; and, were it not for the desire of maternity, would far rather be relieved from his attentions. No nervous or feeble young man need, therefore, be deterred from marriage by any exaggerated notion of the ardous duties required from him. Let him be well assured, on my authority backed by the opinion of many, that the married woman has no wish to be placed on the footing of a mistress.

One instance may better illustrate the real state of the case than much description.

In —, 185-, a barrister, about thirty years of age, came to me on account of sexual debility. On cross-examination I found he had been married a twelvemonth, that an attempt at connection had taken place but once since the commencement of the year, and that even then there was some doubt as to the completion of the act. He brought his wife with him, as she was, he said, desirous of having some conversation with me.

I found the lady a refined but highly sensitive person. Speaking

¹ The physiologist will not be surprised that the human female should in these respects differ but little from the female among animals. We well know it as a fact that the female animal will not allow the dog or stallion to approach her except at particular seasons. In many a human female, indeed, I believe, it is rather from the wish of pleasing or gratifying the husband than from any strong sexual feeling, that cohabitation is so habitually allowed. Certainly, during the months of gestation this holds good. I have known instances where the female has during gestation evinced positive loathing for any marital familiarity whatever. In some exceptional cases, indeed, feeling has been sacrificed to duty, and the wife has endured, with all the self-martyrdom of womanhood, what was almost worse than death.

with a freedom equally removed from assurance, or mauvaise honte, she told me she thought it her duty to consult me. She neither blushed nor faltered in telling her story, and I regret that my words must fail to convey the delicacy with which her avowal was made.

Her husband and herself, she said, had been acquainted from child-hood, had grown up together, become mutually attached, and married. She had reason to consider him debilitated, but—as she was fully convinced—from no indiscrete acts on his part. She believed it was his natural condition. She was dotingly attached to him, and would not have determined to consult me, but that she wished, for his sake, to have a family, as it would, she hoped, conduce to their mutual happiness. She assured me that she felt no sexual passions whatever; that if she was capable of them, they were dormant. Her passion for her husband was of a Platonic kind, and far from wishing to stimulate his frigid feelings, she doubted whether it would be right or not. She loved him as he was, and would not desire him to be otherwise except for the hope of having a family.

I believe this lady is a perfect ideal of an English wife and mother, kind, considerate, self-sacrificing, and sensible, so pure-hearted as to be utterly ignorant of and averse to any sensual indulgence, but so unselfishly attached to the man she loves as to be willing to give up her own wishes and feelings for his sake.

In strong contrast to the unselfish sacrifices such married women make of their feelings in allowing cohabitation, stand out others, who, either from ignorance or utter want of sympathy, although they are model wives in every other respect, not only evince no sexual feeling, but, on the contrary, scruple not to declare their aversion to the least manifestation of it. Doubtless this may, and often does, depend upon disease, and if so, the sooner the suffering female is treated the better. Much more frequently, however, it depends upon apathy, selfish indifference to please, or unwillingness to overcome a natural repugnance for cohabitation.

Other mental conditions may influence the female. Thus, the High Church enthusiast may consider it her strictly religious duty to be separated from her husband during the forty days of Lent; and at page 39 I have given an instance of a wife refusing to cohabit with her husband because she would not again become a mother. I was lately in conversation with a lady who maintains women's rights to such an extent that she denied the husband any voice in the matter, whether or not cohabitation should take place. She maintained, most strenuously, that as the woman bears the consequences—has all the discomfort of being nine months in the family-way, and thus is obliged to give up her amusements and many of her social relations—considering too that she suffers all the pains and risks of childbirth—a married

woman has a perfect right to refuse to cohabit with her husband. I ventured to point out to this strong-minded female that such conduct on her part might be, in a medical point of view, highly detrimental to the health of the husband, particularly if he happened to be strongly sexually disposed. She, however, refused to admit the validity of my argument, and replied that such a man, unable to control his feelings, ought to have married a street-walker, not an intellectually disposed person, who could not and ought not to be obliged to devote her time to duties only compatible with the position of a female drudge or wetnurse.

I am not prepared to say what weight Sir James Hannen would attach to such evidence in the case of a man seeking a divorce, and I am not aware that counsel has as yet urged such conduct on the part of the female in extenuation of immorality on the part of the husband. Of one thing I am quite certain, that many times in the course of the year I am consulted by conscientious married men, who complain, and I think with reason, that they are debarred from the privileges of marriage, and that their sexual sufferings are almost greater than they can bear in consequence of their being mated to women who think and act as in the above-cited instances. I regret to add that medical skill can be of little avail here. The more conscientious the husband and the stronger his sexual feelings, the more distressing are the sufferings he is doomed to undergo, ultimately too often ending in impotence.

Perversion of Sexual Feeling.—Where, in addition to the indisposition to cohabitation which many modest women feel, we find a persistent aversion to it, so strong as to be invincible by entreaty or by any amount of kindness on the husband's part, a very painful suspicion may sometimes arise as to the origin of so unconquerable a frigidity.

The following is a case in which these suspicions seemed to be justified by the facts:—A gentleman came to ask my opinion on the cause of want of sexual feeling in his wife. He told me he had been married four years. His wife was about his own age (twenty-seven), and had had four children, but she evinced no sexual feeling, although a lively, healthy lady, living in the country. I suggested several causes, when he at last asked me if it was possible that a woman might lose sexual feeling from the same causes as men. "I have read your former edition, Mr. Acton," said he, "and though you only allude to the subject incidentally, yet from what I have learned since my marriage, I am led to think that my wife's want of sexual feeling may arise, if you can affirm to me that such a thing is possible, from selfabuse. She has confessed to me that at a boarding-school, in perfect ignorance of any injurious effects, she early acquired the habit. This

practice still gives her gratification; not so connection, which she views with positive aversion, although it gives her no pain. I told him that medical men, who are consulted about female complaints, have not unfrequently observed cases like that of his wife. It appears that at last nothing but the morbid excitement produced by the baneful practice can give any sexual gratification, and that the natural stimulus fails to cause any pleasure whatever. A similar phenomenon occurs in men, and this state is seldom got the better of as long as self-abuse is practised. I feared, therefore, that his surmises were correct, and that the lady practised self-abuse more frequently than she was willing to admit. So ruinous is the practice of solitary vice, both in the one and other sex, so difficult is it to give it up, that I fear it may be carried on even in married life, where no excuse can be devised, and may actually come to be preferred to the natural excitement. Venereal excesses engender satisty just as certainly as any other indulgences, and satiety is followed by indifference and disgust. If the unnatural excesses of masturbation take place early in life, before the subjects who commit them have arrived at maturity, it is not surprising that we meet with women whose sexual feelings, if they ever existed, become prematurely worn out. Doubtless sexual feeling differs largely in different women, and although it is not my object to treat otherwise than incidentally of the sexual economy in women, yet I may here say that the causes which in early life induce abnormal sexual excitement in boys operate in a similar manner on girls. This tendency may be checked in girls, as in boys, by carefuly moral education in early life. But no doubt can exist that hereditary predisposition has much to do with this, independently of education and early associations. It is publicly maintained by some credible persons that there are well-known families, for instance, in which chastity is not a characteristic feature among the females. We offer, I hope, no apology for light conduct when we admit that there are some few women who, like men, in consequence of hereditary predisposition or ill-directed moral education. find it difficult to restrain their passions, while their more fortunate sisters have never been tempted, and have, therefore, never fallen. This, however, does not alter the fact which I would venture again to impress on the reader, that, in general, women do not feel any great sexual tendencies. The unfortunately large numbers whose lives would seem to prove the contrary are to be otherwise accounted for. Vanity, giddiness, greediness, love of dress, distress, or hunger, make women prostitutes, but do not induce female profligacy so largely as has been supposed.1

Malformation in the female is sometimes a cause of non-consum-

¹ See Author's work on 'Prostitution,' 2nd edition, p. 167.

mation, wrongly attributed to want of power in the man. A singularly agreeable and gentlemanly, but very mild-looking man, once called on me, saying that he had been lately married, and had not succeeded in performing his marital duties. I treated him in the usual way and he got stronger, but still the act was not satisfactorily performed, and my patient said enough to induce me to believe that the failure was not to be attributed to him alone. After some little hesitation the lady consulted me. I found her a pretty, pleasing, but excessively nervous and excitable person. At first the mere application of cold water to the generative organs could not be borne, but after some time, and after a good deal of careful management, an astringent lotion was used. When the morbid excitability was somewhat reduced, the hymen was found not only entire, but very tough, presenting the appearance of the finger of a kid glove on the stretchers. Division of the hymen and dilatation of the vagina at length accustomed the parts to bear contact, and a permanent cure was effected. I have reason to believe that cases of supposed impotence arising from this cause are not uncommon; cohabitation is, under these circumstances, not likely to be followed by impregnation when the husband has been previously continent, and his natural disposition renders him particularly unwilling to distress or hurt his wife while she is in this state of unnatural and morbid sensitiveness. It is not improbable that divorces have taken place before now from such causes as these, particularly when interfering friends have exaggerated and envenomed the painful difference between the young couple.

Hernia and Trusses.—Since former editions of this book were published, I have paid considerable attention to this subject, and I think I may now state confidently that trusses may and often do most seriously interfere with the reproductive powers, and in a way that truss makers might readily obviate by adopting some improved construction. The object of mechanicians being solely to keep the hernia in place, the penis or testes are often so carelessly thrust aside or pressed upon, that their functions are seriously interfered with.

When a case of the kind comes under my care, and the patient complains of want of sexual power, I always examine how the truss presses. If I see any reason to suppose that it can by any possibility be the cause of the symptoms, I attempt in the first place, by diet and abstinence from certain articles, to cause absorption of fat in the mesentery and omentum; this being done I attempt, but with great caution, to reduce the size of the truss. It is singular how often this can be effected with safety; I find that not only are the sexual powers often recovered when the pressure is thus relieved, but that the penis,

when it is no longer thrust aside, regains its natural size where that had diminished.

I strongly object to springs crossing the abdomen, inasmuch as I think the procreative powers may very probably be interfered with when a double truss is worn; and in cases such as I speak of, where the impotence is the most marked feature, it becomes a serious question whether the use of the instrument should be continued, particularly when, as in some instances, it has merely been sanctioned as a precautionary measure. I need not say, however, that if a truss on one side can be altogether dispensed with, the partial recovery of the reproductive powers will be more likely to be effected. I believe, moreover, that in many cases great relief can be obtained by judicious alterations in the shape, size, and point of pressure, and in the method of attachment of the truss.

Varicocele, or enlargement of the veins of the chord, is another affection which, in its severer forms, if it does not produce impotence, at least aggravates it. Whenever a patient comes to me with this affection, I at once order a suspensory bandage, or what I prefer, a varicocele ring, an instrument formed of soft pliable metal, covered with wash-leather. These are made of different sizes, and can be procured at Furgusson's, surgical instrument maker, Giltspur Street, City; or of Bell's or Corbyn's, Oxford Street. These rings, in the majority of cases, answer the purpose admirably, but when the scrotum is very thin or deficient in cellular tissue, they are liable to slip off. This may be obviated by tying a piece of thin twine to the ring, the other end of it being attached to the button of the drawers. The ring should be taken off at night, and only put on after the sponging bath—it should be worn for some months.

It should be recollected that there are other causes producing indifference to the opposite sex and deficiency in manly vigour. The most common of such causes is the wretched habit of masturbation, of which we have already treated. A youth who masturbates himself and continues the practice as he grows up to manhood, may evince, even after he has arrived at the marriageable age, no disposition towards the other sex. The patient now finds that only his own solitary pleasure can give him any gratification; as far as women are concerned, he is virtually impotent. Lallemand gives the following perhaps rather too 1 graphic account of such a person's state of feeling

I think I am bound to state that, although we are very much indebted to this distinguished Professor for having written a most valuable treatise on seminal losses, yet the reader must not be led away with the idea that every young man who has been a victim to the vice would suffer as described in this paragraph, or that I would say, "ex uno disce omnes." We must consider these as symptoms in sufferers who have carried the vice to its utmost limits; and the illustrations are not given

towards the opposite sex :-- "Their solitary vice has a tendency to separate those practising it from women. At first, of course, it is on the sex that their thoughts dwell, and they embellish an ideal being with all the charms of imaginary perfection; the habit, however, which enslaves them little by little, changes and depraves the nature of their ideas, and at last leaves nothing but indifference for the very reality of which the image has been so constantly evoked to aid their criminal indulgence. At a later period, when erection is only temporary and is too incomplete for them to think of sexual intercourse, they abandon themselves with fury to their fatal habit, notwithstanding the almost complete flaccidity in which the erectile tissues are left. At this period the handsomest woman only inspires these patients with repugnance and disgust; and they ultimately acquire an instinctive aversion—a real hatred for the sex. They dare not always let their feelings on this subject escape them, from fear of their shameful vice being suspected or the humiliating condition to which they are reduced being discovered; but they lose no opportunity of, as it were, revenging themselves for the repugnance which they believe they produce in women, and which in truth they do inspire in consequence of the instinctive reciprocity of such feelings that is inevitable." (Vol. iii, p. 114.)

This perversion of the natural excitement causing temporary impotence is among one of the saddest pictures which suffering humanity can show. A striking instance of the kind has lately come under my care, as the following letter will prove:

LONDON.

MY DEAR SIR,—A few minutes after this reaches you I shall follow with the old story. Wine, an attempt at sexual intercourse, and failure, drove me again to the abominable habit. I am determined from henceforth to abstain entirely from stimulants, and also from women, when I do not doubt being able to abstain also from the other. I feel, however, so thoroughly unable to recover without the aid of the local operation, that I must beg of you once more to perform it. I come to you to-day entirely for that purpose. Should you refuse to do it, candour compels me to tell you that you would only drive me to some other practitioner, who would adopt the local treatment in some form or other. In regard to my own feelings, I will only say that my punishment is almost greater than I can bear. I shall bring this note myself, shall therefore probably be in your waiting-room when you receive it. I have adopted this as the easiest and least embarrassing mode of telling an otherwise long and painful story.

I remain, my dear Sir, yours, &c.

W. Acton, Esq.

as ordinary typical cases, but as the most strongly marked. I have cited Lallemand for this reason, but I may add that during long experience I have seldom met with such cases as these, and when I have done so it has usually been in persons who, from having had no one to consult or sympathise with them, have exaggerated their miseries by morbidly dwelling upon them.

The writer was a tall, gentlemanly young man. He assured me that he masturbated himself in sleep in spite of all his efforts, and that it particularly occurred after taking wine. He did not find the desire irresistible during his waking moments, except after he had failed in attempting intercourse with women, when in a kind of despair he generally yielded to the old temptation. To avoid the practice during sleep, he had sometimes been compelled to tie his wrists together by a cord that passed round his neck, so as to prevent himself from touching the penis. I have known several such cases, where patients who wished to cure themselves of the habit of masturbation have, against their feelings, sought the society of women, have attempted connection in vain, and then have come to me, ashamed of their failure, disgusted with themselves for the vice, and apparently almost ready to commit suicide from despair and misery. Others have confessed to me that, though sexual intercourse has been attended with difficulty, still the act was accomplished, but that it was attended with no pleasure. As their own self-pollution could still afford them gratification, they acknowledged that they fell back to their old vice, of which they were all the time thoroughly ashamed.

This strange phenomenon of self-abuse affording greater gratification than intercourse with the other sex, the idea of whom, after all, creates the excitement, is more common than is generally supposed, and more in accordance with what we should expect than at first sight appears. The confirmed masturbator (as Rousseau has described) has to picture in his imagination all the female charms that can exist, so as to be able to rouse his flagging sexual desires. But when he attempts for the first time, or at long intervals, to accomplish sexual intercourse he finds much difficulty and very little pleasure. He is probably naturally timid, he dreads the exposure of his infirmities, he fears contamination, and is, on the whole, thoroughly ill at ease. His ignorance, his conscience, the very novelty of his position, and the dread of consequences, tend, for the time, to paralyse his sexual desires.

Another explanation, also to some extent true, is that the nervous system, and particularly the sympathetic system, has been so often and repeatedly excited that it will only respond to the particular kind of stimulus to which it has become accustomed, and is proof against all others.

It would appear, then, that a large class of men suffer from absence of desire for the other sex, either from having never experienced it or from being so entirely engaged in their studies and other occupations that they have ceased to be disturbed by amatory feelings previously experienced, while another class having an imaginary cause for self-accusation are haunted with a belief that they are impotent; they imagine that the consequences of malpractices are written on their counte-

nances, and become misanthropes of the most painful type. This class, although susceptible, when submitted to proper medical treatment, of speedy cure, is, if neglected, in danger of ultimately terminating in suicidal mania. It is, in fact, impossible to over-estimate the dangerous condition of this class of patients, forming, as they do, the border-land between false and true impotence. There is too much reason to fear that many of this class are regarded, not by themselves merely, but by doctors, as permanently impotent, yet who might recover under proper medical advice. In the infancy of lunatic medical science persons were shut up for life in various asylums as hopelessly insane, to whom nothing more than eccentricity, strangeness of conduct, or weakness of mind, could have been properly imputed. I confidently believe that it is not too much to affirm that, thanks to equal ignorance, many temporarily impotent persons are permanently debarred from marriage or separated from their wives. Just as more accurate knowledge has saved the former class, the latter may, I trust, be saved in like manner from their bitter fate. These self-accusing persons will, of course, continue to condemn themselves; is it too much to hope that they will cease to be condemned by lawyers and doctors? From the foregoing observations it appears that the temporarily impotent are divided into three distinct classes,-those whose powers have never been called into action; those whose powers, after coming into existence, have become dormant, owing to some counteracting influence; and those whose powers have been affected by secret abuse.

Sometimes, as we have seen, the attempt to enjoy sexual congress is followed by failure. Such cases are familiar to me, though they are probably far from common. Even in them it would be an extremely rash judgment to conclude at once that the failure is due to real or permanent impotence. A timid man distrustful of his powers may marry, and obtaining no sympathy from his wife, fail in the attempt to consummate the marriage; if he neglects to obtain medical advice he is, no doubt, in great danger of becoming permanently and incurably impotent; but, in the great majority of such cases, proper medical treatment is all that is required to call into action the latent power. It sometimes happens that after marriage has been duly consummated, temporary impotence supervenes. This, again, is usually occasioned by an attempt to perform the act being, from some accidental cause, followed by failure, and owing to mauvaise honte, or timidity, which results in the man's becoming really impotent towards that particular woman. In such cases proper medical treatment is all that is required to restore the patient to potency. We find, then, that so-called impotence is divided into two distinct classes, one of which I may call true impotence, or absence of virility; and the other, false impotence, or virility in abeyance.

SECT. II.—TRUE PERMANENT IMPOTENCE, OR ABSENCE OF VIRILITY

Permanent Absence of Desire.—So unnatural a phenomenon as an entire absence of sexual desire, alluded to at page 201, must always be rather an alarming and a suspicious circumstance. Unfortunately in the majority of such cases the medical man is seldom consulted at an early period, as neither the patient nor his friends are aware that there is anything unusual in his condition until it is accidentally discovered.

I shall hardly be putting the case too strongly if I say that the distinction between false and true impotence, between abeyance of virility and absence of virility (I am speaking, of course, of those cases where there is no physical malformation to which to attribute the want of power), is one not so much of kind as of degree. The deficiency, that treated in time would have proved temporary and amenable to remedies has by neglect become chronic, and passed into the permanent and irremediable stage of true impotence, or absence of virility.

It is impossible to lay down any rules by which the medical man can satisfy himself on the first visit of the patient whether the border line has in fact been passed which separates the two stages of the disorder, the temporary from the permanent, the false from the true. The symptoms will in both cases be much the same, the treatment, speaking in general terms, and making all due allowances, identical.

The only test that the medical man can apply is that of experience. If he finds the symptoms after a time beginning to yield to treatment he will be justified in adopting a favorable view of the case, and in holding out hopes of ultimate recovery. But if, after a reasonable time has elapsed, he finds his efforts unattended by any result, he will be compelled, however reluctantly, to adopt the opinion that his remedies have been applied too late, and that the case has in fact passed beyond the reach of the physician's skill.

I may, however, point out a few of the leading symptoms which usually indicate that the later stages have been reached, and that the disorder is present in its more serious form. In such cases the surgeon appealed to will usually find that the individual is fat, without hair on his face, or even down on the pubes; the testes and penis are small, almost rudimentary, like those of a young child, there is no sexual

¹ Dr Davy has given the following post-mortem appearances in a patient who showed (according to the account given by his comrades) an aversion to the sex. "There was little hair on pubes or chin, the *partes naturales* were all small, the



desire, and the voice is often weak and almost falsetto in quality; in fact, the condition is much the same as that of the castrated individual or eunuch.²

In such a case it is clear that an imperfect development of the testes has resulted in a state of eunuchism, accompanied by many of the peculiarities which, both in animals and in human beings, follow on castration.

This partially undeveloped state of the reproductive system usually indicates itself, among other signs, by a marked indifference to manly sports and exercises, and a visible deficiency in virile attributes generally.

If, on examination, it should appear that the testes, instead of being merely small, are little more than rudimentary organs; if they are apparently mere nodules; if this change of structure has followed an early attack of mumps or some inflammatory affection of the testes, or an accident which has injured them early in life, the case must, I fear, be considered as a hopeless one, and the patient should be treated as permanently impotent. Terrible as this doom may seem, it is singular to notice how indifferent such persons appear to their deficiency. They do not know the value of what they never possessed and never will possess, and they pass through life contented men, evincing neither aversion to nor liking for the opposite sex.

It may be some satisfaction for nervous patients who may read these pages to be reminded that the really impotent men are, as a rule, thus indifferent to their symptoms; and I may lay it down as a general rule that a man who is very timid about the existence of impotence is not likely to be impotent at all, but only fears he may become so.

Abnormal condition of the Erectile Tissue.—Where, however, manifest impotence exists, which cannot be accounted for by the accidental causes, so to speak, of early excess, or the predominance of the nutritive

larynx was small, the skin delicate. A very minute portion of fluid only could be procured from the vasa deferentia, which under the microscope exhibited numerous small particles and a few larger globules, but no spermatic animalcules. The fluid of the vesiculæ was also small in quantity and destitute of animalcules; it was of a light-brownish hue, slightly opaque, containing some globules, and did not change the colour of turmeric or of litmus paper. The fluid from their fundus was most gelatinous and appeared to consist chiefly of mucus. The vesiculæ seminales in this instance and their contents resembled those of such castrated animals as I have hitherto examined. ('Edinburgh Medical and Surgical Journal,' vol. L, p. 7.)

² Pope Clement XIV, in the eighteenth century, abolished castration of youths, which was then practised in Italy for the purpose of retaining the soprano voice. It is well known that the castrated preserve the shrill voice (voix aigue) of infancy, at the same time that the chest becomes fully developed, thus giving volume to the voice. Women were not allowed to sing in the cathedral or church services; hence this horrid mutilation, as it qualified the victims to sing soprano parts.

over the other functions of the frame, it is necessary to closely investigate the structure of the parts. It will generally be found that this kind of impotence depends on some lesion of the nervous condition or trabecular structure of the penis, or imperfect development of the erectile tissue. The penis may be, for instance, of an unusual length, but thin, particularly at its base. It may be terminated by a large, fungiform glans, extending beyond the corpora cavernosa, and being almost always uncovered, or at least imperfectly covered by the prepuce. These massive penes, which seem to thin as they approach the point of their insertion, are almost invariably deficient in erectile power. In fact, the erections are rarely complete, particularly towards Where, therefore, this peculiarity of formation is very marked, permanent and hopeless impotence may, and probably will, On this subject Lallemand remarks:-"The be found to exist. firmness of the erectile tissues differs greatly in individuals of the same age, independently of their volume and form. When I have noticed the penis completely hanging on the scrotum, the corpora cavernosa empty, flabby, without any resistence or elasticity under the finger, I have always remarked that the function was, to say the least, not energetic, and a cure, if possible, difficult." (Vol. ii, p. 187.)

A very small and shrivelled condition of the organs may equally produce permanent impotence. This is described by Lallemand thus:—
"There is unnatural development of the prepuce, depending probably on the unusually small size of the penis. The rudimentary state of the erectile tissue, as well as of the testicles, necessarily allows of but little energy in the functions of these fundamental parts of the generative apparatus." (Vol. ii, p. 185.)

Again, we find, on the other hand, that in some cases the penis is hard and inelastic, the coverings are firm and indurated, and not contractile. The cause of this state has been, I believe, frequently attributed to abuse, or excesses, or to blood having been accidentally effused into the trabecular tissue of the organs. In other instances inflammation has caused the deposition of lymph, which has not been reabsorbed, but remains in the shape of small, indurated masses. The deposition of this lymph in the coverings of the penis causes them to lose their elasticity, the organ becomes non-erectile, and the man becomes incurably impotent.

Tubercular Affection of the Testes.—Impotence is occasionally found arising from syphilitic deposits in the testes. It is partial or entire, according as one or both organs are more or less deeply implicated and in proportion as the deposits have existed for a longer or shorter time. Orchitis may more or less interfere with the functions of the testes, but the impotence arising from the inflammation set up in the

parenchymatous structure may rapidly subside, and the organ recover its full function. When, however, hard nodules remain in the epididymis, and in spite of treatment are persistent in both testicles, a grave suspicion may arise whether the patient will ever regain his virile powers; if, however, only one organ is affected, complete recovery may, as a rule, be expected. Each case must be judged by itself, and the prognosis will depend upon a variety of circumstances that cannot be noted in these pages.

Prognosis.—When we remember the variety of complex and coordinate actions which perfect sexual congress requires, it seems really astonishing that impotence should not be more common than it is.

To make coition complete, there must be—1. Excitement of the glans penis. 2. Suffusion of blood through the organ. 3. Contraction of the bulbo-cavernosi and ischio-cavernosi muscles. 4. Welling back of the blood of the bulb in the corpus spongiosum urethræ. 5. Compression of the dorsal vein of the penis by the anterior portion of the bulbo-cavernosi muscles. Now, if any one of these phenomena is checked or prevented, virtually impotence is the necessary result. Thus, if the venous plexuses which make up the spongy portion of the urethra present varicose tumours, or if the muscle is enfeebled or paralysed, the blood not arriving in sufficient quantity at the glans, the necessary excitement will not arise, and the erethism will not occur, and, as the sensibility of the glans ceases, the erection will subside.

Considering, then, the nature of the causes of impotence, we can hardly be surprised that, in the face of any serious nervous or organic lesions, the prognosis must be generally unfavorable, especially in the more severe cases, or in those instances in which the affection has been of long standing. Experience teaches us that, in many instances where the loss of power is due to early abuse, or to too great demands having been made upon the nervous system at a time when it was unequal to its duties, this condition can often be remedied by strengthening the constitution generally, and allowing it to repose and rally-in fact, by pursuing the course exactly opposite to that which has brought about the complaint. In cases where there is no physical lesion or other condition rendering them hopeless, it is certainly not by a few doses of physic, or the administration of any stimulant or quack remedy, that we can expect restitution of power; and undoubtedly there is often great difficulty in applying even the proper treatment to these melancholy cases. The hardest part of the medical man's task frequently is to rouse the patient from the depression which impotence induces, and to convince him of the inutility of dwelling on the dreadful self-accusation,

which only tends to further unnerve him and to complete the prostration of his system.

Lallemand remarks in his terse though rather overdrawn description of such cases1—" In losing before the usual age the generative function, man loses the consciousness of the dignity of his essential character, because he feels himself fallen in importance in relation to his species. In consequence, the loss of virile power produces an effect more overpowering than that of honours, fortune, friends, or relatives; even the loss of liberty is as nothing compared to this internal and continual torture. Those who suffer from injustice or misfortune can accuse their enemies, society, chance, &c., and invent or retain the consciousness of not having deserved their lot; they have, moreover, the consolation of being able to complain, and the certainty of sympathy. But the impotent man² asserts that he can make a confidant of no one, that he can expect sympathy from no one. His misery is of a sort which cannot even inspire pity, and his greatest anxiety is lest any should penetrate his dismal secret." (Vol. iii, p. 119.)

DIAGNOSIS.—Before marriage, it has been supposed that it is very difficult for a medical man to decide whether an individual is truly impotent or not. Lallemand greatly exaggerates and indeed misrepresents the case, when he says that the power of easily maintaining perfect continence and entire quiescence of the sexual organs and desires "are fair grounds for presuming that there is little, if any, energy in the generative system, for if the semen was retained in the vesiculæs seminales it would produce from time to time energetic, or at least perceptible, effects." (Vol. ii, p. 245.)

So vague a test as this can be hardly ever applied with safety. For instance, if a healthy man has his organs well developed, suffers only occasionally from emissions, has never abused his sexual powers, and is subject occasionally, in the early morning, to erections; then I should

'I have called this description rather overdrawn. Any symptoms so entirely hopeless are comparatively rare, and I must here again warn my readers against hastily applying to themselves any descriptions or cases which are after all exceptional. This caution is the more necessary, as I have often met with patients who seem to have read this as well as Lallemand's book apparently with the sole purpose of discovering such passages as the foregoing, and imagining that the most extreme cases really represent their own condition. It must be remembered that this volume is written for the profession, and in the course of its pages I have to describe severe typical cases as distinguishing different phases of the complaints here treated of.

² The belief, or rather assertion, of the patient, that he can make a confidant of no one is most untrue, as my profession are admitted to be ever ready to extend their sympathy to the afflicted; and there are, I believe, few clergymen who would not sympathise fully with their distresses if the sufferers would but make a confidant of them.

have no hesitation in saying that, although he may have been always continent, and may have found it easy to be so, there is, nevertheless, little doubt of his capacity for performing the sexual act.

If, however, real impotence is thought to exist, we must push our diagnosis further, and inquire whether it extends to the entire act of copulation, or only to some part of it, that is, whether the weakness depends upon something amiss in the acts of Erection or Emission, or in the condition of the Ejaculated Semen, subjects which have been fully treated of in preceding pages, as it is most important that the surgeon, in investigating the local symptoms, should discover which of these functions is imperfectly performed, otherwise he stands but a poor chance of relieving his patient's special complaint.

TREATMENT.—If, then, the preceding remarks are borne in mind. the proper treatment is no longer a problem of extreme difficulty Where impotence is curable at all, the general rules as to the requisite treatment can be comprised in a very few words. To give the system rest—to improve the general health, so that the nervous centres shall have time, opportunity, and encouragement to rally, if that be possible —to invigorate the muscular powers so that both voluntary and involuntary muscles may regain their tone—these are among the most important maxims to be borne in mind. At the same time it is necessary to avoid as much as possible any local or other stimulants which merely excite without strengthening. In the curable cases it is probable that the nervous system has merely been over-excited beyond the natural limits which the constitution imposes. The one object the medical man should have in view is to restore the nervous power, or rather to allow it to restore itself-not to excite or exhaust it still further. The diet should, I need hardly add, be of the most wholesome and nutritious kind, for we should not forget the true old proverb—"Sine Cerere et Baccho friget Venus."

Hitherto I have spoken of the general treatment of impotence; in other words, of the best means of improving the health. By doing this, the sexual organs will, probably, in all the milder cases, become, in common with other functions, equal to their duties. Some, however, not content with these simple means, have devised remedies for the purpose of stimulating the flagging powers. No doubt can exist that in certain persons, when the affection arises from some temporary cause—more especially in the timid and hypochondriacal, or those suffering from mental disquietude, the temporary employment of stimulants may be very proper. But though this treatment is occasionally justifiable and advantageous, it is most unscientific and dangerous in the majority of cases—particularly in those of general prostration—where the immediate effect of stimulating the organs can be no other than to produce emission. Here stimulants can have no

other effect than to aggravate the mischief; whereas, had the general health been first improved, the local disorder next relieved, and subsequently a stimulant given, we could understand the formula. Such is the true method of effecting a cure; and I shall attempt, in the following pages, to indicate the principles which should guide its application. Had these principles been more generally followed, many of the invalids we meet with would have been rescued from much physical and mental suffering.

Cantharides have been employed against impotence. They form the basis of the pastilles de Serail, as well as of the numerous pills, pastes, and opiates which constitute in the East the principal commerce of all those who sell drugs. The Spanish fly enters largely into the diavolini and other aphrodisiac preparations still too much employed in Italy.

Lallemand protests strongly against the use of this dangerous stimulant.

"The effect," he says, "produced by cantharides on a healthy man, has induced persons to believe that they could restore virility lost from excesses. Thus, charlatans, and even many legitimate practitioners, have at all times prescribed cantharides as a traditional resource. For my own part, I have seldom met with an impotent person who has not had cause to regret using this drug. The greater proportion have not even experienced the momentary benefit which they had expected; and in many cases the erectile tissues have become smaller than in the habitual state of repose. Some few have experienced erections more or less energetic, which have lasted a longer or shorter period; but the loss of semen has exasperated the symptoms instantaneously, or very shortly afterwards."—Lallemand, vol. iii, p. 333.

No doubt can exist that the habitual employment of cantharides is prejudicial; but in the present day, when this substance is no longer given so indiscriminately as it was formerly, the surgeon may occasionally prescribe it with advantage. Thus, where the erection is feeble, when the fears of the patient exert much influence over his mind, or when there is doubt of his power to perform the copulative act, a few doses are very advisable. But after success, the remedy must be left off, for we do not want to excite the organs frequently, experience teaching us that the repeated shocks on the nervous system will often only further depress the vital powers (for formulæ see Appendix A).

Phosphorus is, in my opinion, one of those pharmaceutical preparations which the modern surgeon may most frequently employ in the treatment of impotence. The object is to supply that particular pabulum which the too frequent exercise of nervous force appears to exhaust. We may theoretically infer that in these complaints there has been great expenditure of phosphorus in its various combinations, and that there may be a deficiency of this substance in the system, just as in some other diseases, particularly chlorosis, we are well aware that there is a deficiency of iron. In either case we should supply the system freely with the element it seems to need, and in such a form as may be easily taken up and retained in the circulation. Practice, as well as theory, seems to sanction this treatment, and daily experience teaches me that phosphoric acid in combination with syrup of orange-peel, and syrup of ginger, is a most valuable adjunct, in all those cases where there is reason to suppose that semen is not secreted in sufficient abundance, where too rapid ejaculation attends the sexual act, or where connection is attended with serious nervous depression. (See Appendix A.)

Strychnine has been frequently recommended in the treatment of impotence, and I have found it a very valuable tonic in cases attended with great nervous depression, whether resulting from sexual excesses or any other cause. I have noticed it to be equally beneficial in those forms of impotence which depend upon weak or imperfect erection. I find that it is capable of increasing the general muscular energy, and in such cases I usually prescribe it, either alone or in combination with quinine, or in the form of pills combined with other remedies. (See Appendix A.)

Electricity must be classed among the modern remedies for impotence. I have had considerable experience of its powers, and I have every reason to be satisfied with the results. I find that it has answered best in those lethargic constitutions that require rousing, and simply demand a local stimulant capable of determining blood and nervous power towards the generative system.

If, however, I admit the value of this remedy in such cases, I must raise my voice against the indiscriminate and general employment of belts and other apparatus, so largely advertised. Hardly does a day pass but I find cases coming under my notice of patients wearing these appliances, who say they have derived no benefit, although they have worn them for months. Such a result is not surprising. If these batteries are efficient, they are always acting, and consequently are continually stimulating the sexual nerves. This, as I have above mentioned, has a most injurious effect.

It is one thing to rouse a lethargic constitution at periods when the stimulus is required, but quite another to keep the sexual organs in a constant state of nervous excitability. The consequence naturally follows that, at different and at long intervals, when the excitement is required, this valuable remedy ceases to exert any influence, and the most heart-rending effects are produced on the mind of the patient,

who, believing that a cure is impossible, relapses into a condition of desperation that no one can conceive, except those who have witnessed it. It is, moreover, difficult to rouse the nervous system a second time. The further objection to these batteries is that, as the patient can apply them himself, he does so at most inopportune moments, dispensing with the medical superintendence of the remedy which is necessary to secure a good result. I raise my voice most energetically against the public using either electricity or cantharides, without first taking the opinion of a medical man, as to whether such stimulants are applicable to the case, and also as to the dose, and the frequency and time of application.

SECT. III.—STERILITY

I have hitherto endeavoured to show how some disorders which, to a certain extent, have the appearance of true impotence, or absence of virility, are to be distinguished from the incurable condition. Before entirely quitting the subject, I may mention another state which is sometimes confounded with it. Sterility is the term applied to all those morbid states which, either in the one or the other sex, prevent the reproduction of the species when sexual intercourse has taken place. When, however, the term sterility is mentioned, it more especially applies to the female, and is synonymous with barrenness.

Non-descent of the Testes is a cause of impotence in some men, and it appears almost invariably to be attended by sterility. I do not pretend to say that every man who has an undescended testicle must necessarily be altogether impotent; a few cases are recorded of men whose testes have never descended into the scrotum having had families; but I have met with several instances, one of which I shall presently describe, where, I believe, sterility arose entirely from this cause. It is true that in the elephant, and some other animals, in the cetacea, in birds and reptiles, the testes are constantly found in the abdomen, side by side with the kidneys, lungs, &c. These facts point to the possibility that if the adult's testes are truly in the abdomen, they may secrete semen as readily as when in the scrotum. When

I say may, for I believe that in the greater number of instances the testes, even if free within the abdomen, will not secrete spermatozoa or living animalcules. This subject has been repeatedly examined in France, and among others M. Goubax, professor of the veterinary school at Alfort, says, "When the testicles remain within the abdomen of the animal they augment very little in size. The substance of the gland, although healthy, remains soft, as it is in the fœtus. The semen which is contained in the vesiculæ seminales of the side corresponding to that on which the testis is in the abdomen, is found on microscopic examination to contain no spermatic animalcules,

however, they have been compressed into the inguinal canal, or in the groin, such pressure may have been, and probably has been, exercised on the glands as to impair their secreting powers.

Breeders look with great distrust on animals with undescended testes. The phenomenon of undescended testes has lately been investigated in France. M. Godard has written a very interesting account of this condition, which he has called Cryptorchidie. This author goes on to say, that in the case of a dog-wolf he examined, in which both the testes were undescended, their structure was neither fibrous nor had they uudergone fatty degeneration; the parenchyma was gray and dryer than usual, although of a natural consistence; in size the gland was a third smaller than usual. The semen contained no traces of seminal animalcules, but simply epithelial cells. M. Godard further observes that, in the case of a man with undescended testicles, whom he examined after death, the section of the testes presented no peculiarity. The glandular parenchyma was of the ordinary colour; the canals were healthy and pervious; the liquid which was pressed from them contained epithelial cells, blood, and fatty globules. The vasa deferentia contained a liquid composed of fatty globules of variable No animalcules, but epithelial cells were present. He personally examined the seminal secretion of many living men who had both testes in the abdomen, and his conclusion was that in the Cryptorchis no seminal animalcules are ever found in the secretion, although the ejaculated fluid has been frequently examined. He concludes that "men both of whose testicles are arrested in their evolution are sterile, but not impotent; that those who have for their generative apparatus only vasa deferentia are sterile, and nearly incapable of sexual intercourse."—Comptes rendus des séances de la Société de Biologie, tome iii, série 2, 1856, p. 315.

My own experience in practice certainly is, that men with undescended testes have no family. I was consulted by a gentleman in 1861, in consequence of his wife's having no children. My patient told me he had been married some years, and the lady whom I likewise saw, presented all the external attributes of a person likely to have a large family, and I was aware that she had consulted a celebrated physician, at whose suggestion the husband had come to me. There was no suspicion on my part at the time that the testes were absent, or even imperfectly developed. However, on examination, it was and observation and experience prove that the animals in whom double Cryptorchis is found are unfruitful or barren. In corroboration of these views, Mr Simonds, the Professor of Medicine at the London Veterinary College, kindly writes to me to say that—"Up to the present my examination of the fluid obtained from the seminal ducts of the testes of the several domesticated animals, has shown an entire absence of spermatozoa. I believe that sterility, not unfrequently, is due to a cause of this kind."

impossible to detect any testicles in the scrotum, and pressure in the groin did not give the patient any peculiar pain. There was, nevertheless, abundant evidence that the testes existed, although they had not descended. In no other respect did the patient differ from other men, and he assured me that the sexual feeling was natural, and that he had connection once or twice a week, the emission being as abundant as he supposed it would be in other men. I must, notwithstanding, say that, as far as my personal observations go, I look with great suspicion on the procreative powers of any person with undescended testes.

I should, however, guard myself against saying that the respondent was impotent; on the contrary, such patients perform their marital duties satisfactorily.

Before leaving this branch of our subject, I should remind the reader that all the practical results of sterility can be, and constantly are, produced by the mechanical effect of a—

Stricture of the urethra, by preventing the emission of semen. The description of this form of disease of the reproductive organs is not within the scope of the present treatise. For further information upon it, I may refer to my larger work on the 'Urinary and Generative Organs,' page 81.

Impregnation is, of course, rendered almost impossible by a serious stricture, as the semen, instead of being at once ejaculated, can only dribble away afterwards when all erection has disappeared. The act of connection, moreover, is often painful, the pain being generally felt during the ejaculatory act. This form of sterility is amenable to treatment, such as dilatation and other appropriate measures for removing the stricture.

Impotence arising from a similar cause is observed in sheep. The high-fed and high-bred rams, from which the best breeds are obtained, become subject to a kind of stricture arising from the deposit of calcareous matter in the urethra. The peculiar conformation of the organ in sheep conduces to this result.¹

¹ The glans penis of the ram consists of an oval and wrinkled swelling, divided horizontally at the end, looking like the head of a snake. From this glans projects a long, thin appendix, of a consistent character. This appendix, which shepherds call "the worm," tapers to a point, and the canal passing through it is very small. A ram is sometimes observed to be very uneasy, and apparently to be less and less able to micturate. On examination, the vermiform appendage is found distended and stiffened from an accumulation of calcareous matter within the urethral canal. This in some instances can be removed by slightly pressing and rolling the appendix between the fingers, which will at once relieve the strangury, and save the animal, but frequently either the ram has to be killed or part of "the worm" be removed. If sufficient is left, the ram may still be able to breed. And even if complete connection is impossible, breeders still use these mutilated animals, called "teazers," to

STERILITY 233

Another cause of sterility is the inflammation of, and subsequent obstruction of the chords; this is further alluded to at page 225.

Carpenter, in his 'Comparative Physiology,' particularises—

Obesity or Corpulence as a cause of sterility; he says "it must be observed that there is a certain degree of antagonism between the nutritive and the generative functions, the one set being exercised at the expense of the other. The generative apparatus derives the materials of its operations through the nutritive system, and is entirely dependent upon it for the continuance of its activity. If, therefore, the generative activity be excessive, it will necessarily draw off some portion of the aliment destined for the maintenance of the fabric at large. It may be universally observed that where the nutritive functions are particularly active in supporting the individual, the reproductive system is in a corresponding degree undeveloped, and vice versâ." That excessive corpulence tends to generative debility or sterility, is brought almost daily under my notice. It is likewise becoming very well known amongst breeders of the finest stock. At the Veterinary College I have had various opportunities of seeing this exemplified. It is noticed that sterility in bulls rarely occurs in the commoner sorts. Those that have been seen sent to the college, in consequence of not getting stock, are found to be the highly-bred animals; a class of prize stock that are not prolific; the owners caring only to breed animals that produce fat readily. If we had the statistics of these high-bred cattle, we should find that the large prices obtained for them are fully warranted, as the sire and dams are anything but prolific; and the vulgar saying, "a lean dog for a bitch," is a terse but significant mode of enunciating the same proposition.

There is every reason to suppose that in many of the highly bred stock first alluded to, the testis has itself undergone fatty degeneration.

Sterility arising from corpulency is by no means a hopeless case, provided exercise and attention to diet can be, and are, observed.

That sterility then frequently depends upon the undue increase of fat in the male may be considered an established fact. There is every reason to believe that the same cause occasionally induces sterility in females.

I was lately in conversation with a gentleman, a large farmer in Suffolk. He told me that he is often disappointed when he wishes to breed from cart-mares. This year, out of his own working stock of twenty-eight horses, eleven mares did not *stand*, greatly to his disap-

excite the ewes, and so spare the valuable tups some fatigue. The subject is so curious that it fully deserves the careful attention which Mr. Simonds, professor at the Royal Veterinary College in London, has bestowed on it, to whom I am indebted for much information on this and similar subjects,

pointment and loss, as a yearling colt is worth twenty pounds, and the mare ceases work only during one month before and during one month after parturition. This sterility he attributes to the high condition his cattle are kept in by the carters, who, proud of their teams, do not care to see them in foal. To obviate it, fresh stallions have been purchased, and with as little success, sterility still prevailing. Among these eleven mares there were young as well as old ones, but none of them proved in foal.

The treatment of cases of Corpulence has within the last few years excited considerable attention, no doubt through the pamphlet of Mr. Banting, who, however, is indebted to Mr. Harvey, a member of our profession, for the plan he recommends. I have from the first strongly recommended the chief features of the system as beneficial for the general health, especially in the case of persons of a corpulent No doubt can exist that abstinence from, or extreme moderation in the use of fat, butter, milk, cream, bread, potatoes, sugar, and beer, will in one week considerably diminish the weight, and in fat persons remove many uncomfortable sensations. When a patient is over stout the weight may be fairly and safely reduced one or two pounds weekly. I have often found such treatment assist the recovery of sexual power in persons in whom it has been failing. Abstinence has been proved to work equally well with animals, and I have heard of several instances of over-fat bulls that had become sterile, recovering their procreative powers after being sent to work on the farm upon less food.

Tubercular Affection of the Testes.—Sterility may also arise in delicate constitutions from tubercles deposited in the testis itself or in the epididymis.

SECT. IV.—IMPOTENCE CONSIDERED AS A GROUND FOR A DECREE OF NULLITY OF MARRIAGE

On the subject of this section, medical authorities are almost silent, and it is to be regretted that more attention has not been paid to the question. The natural consequence of the absence of scientific inquiry is the existence of a very considerable amount of physical infirmity capable of mitigation or removal. The purely medical aspect, however, is not the only or even the most important. In these days when divorce has ceased to be the luxury of the rich, and been placed within the reach of all, questions bearing upon the right to a release from the marriage tie have acquired proportionately increased importance. Impotence is, as my readers are probably aware, a good and sufficient ground for obtaining a decree of nullity

of marriage, and it is upon the medical testimony adduced that the application must stand or fall. This being so, any treatise upon the subject of impotence would be incomplete which was simply confined to the purely medical side. I propose in the following pages to supplement my inquiries into the nature and character of impotence, with a short investigation of the principles on which the Court acts in dealing with applications for nullity of marriage on this ground. I shall briefly describe the practice of the Court, and the mode of procedure, and offer a few suggestions, founded upon my own experience, in the hope, that the effect of drawing the attention of my reader to the subject may be the means of producing an alteration of the law.

The legal definition of impotence is inability to consummate marriage. This impotence must be incurable, and must have existed from the time of the marriage, and the woman, to entitle her to a decree of nullity of marriage, must prove herself to be "virgo intacta sed apta viro." For legal purposes, impotence may be divided into two heads. 1st. It may be capable of direct proof. 2nd. It may be incapable of direct proof, but the subject of necessary inference.

1st. The non-consummation of the marriage may be attributable to some apparent and incurable defect, such as malformation—absence of testes—non-development—arrest within the abdomen—non-descent of the testicles.

2nd. In the absence of any apparent physical defect the marriage may remain unconsummated.

In the first class of cases the Court, on being satisfied of the existence of the defect, of its permanent character, and of the consequent non-consummation of the marriage, will at once grant a decree of nullity of marriage. In the second class of cases the procedure is more cautious. Here the only facts capable of direct proof are, that the marriage has not been consummated, and that the woman is apt for coition, and the Court will not at once infer either that the state of circumstances is due to any defect in the man, or that the defect, if existing, is other than temporary and removable. The Court will, however, after the lapse of a sufficient period of cohabitation-if the marriage still remains unconsummatedinfer that the man is impotent, and grant a decree of nullity of marriage. The cohabitation must, in order to raise this inference, have been carried on for the space of three years, and must have been continuous, by which is intended, not that the parties should have lived together de die in diem, but a general cohabiting only as is usual among married persons. The rule as to triennial cohabitation only applies when the inference is left to be presumed from continual non-consummation, and not where it is plainly proved aliunde.

Cases where the alleged impotence is attributed to the apparent physical causes above enumerated may or may not, according to degree, be diagnosed with certainty, and may or may not be legitimate causes of nullity of marriage. The rule which I adopt in practice in reference to such cases is to advise any patient so circumstanced not to resist the decree. And it appears to me that in accepting these physical indications as conclusive of impotence, the Courts have adopted a test which, though it cannot be regarded as producing absolute scientific certainty, is nevertheless of sufficiently universal operation as to secure substantial justice. As will be presently seen (p. 244), I am unable to regard with equal satisfaction either the three-year rule above referred to, or the adoption—as the test of the presence or absence of potency—of ability or inability for erection.

The principle on which the Court acts in granting a decree of nullity of marriage on the ground of impotence, appears to be, that in order to constitute the marriage bond, there must be the possibility, present or to come, of sexual intercourse; without this possibility the two principal ends of matrimony cannot be obtained. Incapacity to consummate a marriage, however, is no ground for a decree of nullity, unless the incapacity be permanent; if there is a possibility that its cause may be removed, the Court will not pronounce a sentence of nullity, although such cure may be highly improbable. On this ground it has been held that impotence not congenital, but temporarily occasioned by excessive self-abuse, and therefore such as may possibly, though not probably, be cured, is not a ground for a decree of nullity of marriage. Thus in S. f. c. E. v. E., 3 S & T 240, it was decided that even assuming the wife to be a virgin intact, a point on which some doubt was thrown by the evidence, the decree prayed for could not be made, as the medical men negatived malformation, and negatived impotence from disease or natural infirmity, but ascribed the non-consummation of the marriage to temporary incapacity, occasioned by the indulgence of a disgusting and degrading habit, and believed that such incapacity would continue until that habit was corrected, but no longer.

It moreover appears that in order to found a sentence of nullity of marriage by reason of impotence, present impotence must be made out, and improbability of recovery. When there is probability of recovery the Court will not annul the marriage. Impotence, it must be observed, does not render a marriage void, but only voidable, or in other words it is in the option of the injured party to hold to the contract or annul it. "It is obvious enough," says Sir J. Wilde, "that this matter of impotence is one which ought to be raised only by the party who suffers an injury from it, and who elects to make it a ground for asking that the contract of marriage should be annulled. For although it has been said that the procreation of children is one

main object of marriage, yet it cannot be doubted that marriages between persons so advanced in years as effectually and certainly to defeat that object are perfectly legal and binding. The truth is, 'Consensus non concubitus facit matrimonium.' In all cases in which the incapacity to marriage is one in which society has an interest, and which rests on grounds of public policy, it would be wrong and illogical that validity or invalidity should depend upon the option of the parties, and in all such cases the marriage is absolutely void, and not voidable But impotency has always hitherto been considered in the Ecclesiastical Courts (and since their abolition in the Divorce and Matrimonial Court) as a matter of personal complaint only. I do not find the principle of the Court's interference to annul such a marriage anywhere distinctly set forth. But I conceive that it has a sound basis of justice in the consideration that the party complaining was, though perhaps unintentionally, deceived in the contract and ought not to be bound by it. On whatever ground it is rested, this much at least is clear, that it has been, and is always dealt with as a matter of personal complaint and grievance, and that it has been so dealt with is apparent from the fact that the Courts have been in the habit of requiring many conditions to be fulfilled before they would grant relief, all of which are inconsistent with the notion that the marriage is absolutely void. Thus the party complaining must be sincere in the ground on which he is asking relief, there must be no unreasonable delay, and the defect must be incurable." (A. v. B. and another, L. R., 1 P. & D. 559.)

Relief in suits of this nature is never accorded by the Court unless the petitioner be prompt in seeking it, and sincere in the motive for doing so. (M. f. c. C. v. C., L. R., 2 P. & D. 414.) Thus, when the petitioner in a suit for nullity on the ground of his wife's malformation had not instituted the suit until upwards of eleven years after the marriage, the Court, before making a decree in his favour, required an explanation of the delay. When a man has submitted to such a grievance and has forborne to seek relief for a considerable length of time, the Court will presume that when he does come before it, he comes not to be relieved from a real grievance, but for some other reason. (E. v. F. f. c. E., 33 L. J. P. & M. 37.)

In another case where a period of ten years had elapsed between the solemnisation of the marriage and the commencement of the suit, and it appeared that the petitioner was actuated by an indirect motive in taking proceedings, the Court refused to make a decree of nullity of marriage on the ground of the husband's impotence. (M. f. c. B. v. B., 33 L. J. P. & M. 203.)

So also in a suit by a woman for nullity on the ground of the man's impotence, the petitioner's evidence that the marriage had never been

consummated was neither corroborated nor contradicted, the medical evidence being consistent both with consummation and non-consummation. It appeared that cohabitation had continued for eight years without complaint on the part of the petitioner, and that the separation was caused by the respondent's ill-treatment of her; the Court dismissed the petition. (T. f. c. D. v. D., L. R., 1 P. & D. 127.)

In another case the physical appearances of the wife were, according to the medical witnesses, such that no opinion could be formed whether for two years she had had ordinary and regular connection with her husband or not. It appeared further that the wife saw her mother about every fortnight during the two years of her cohabitation, but she made no complaint, although she complained much of other matters, and was by no means satisfied with her husband's treatment. At the end of two years and a few months she left him. But the cause of her doing so was his alleged violence, for which she summoned him before the magistrates. At this period she had taken refuge with her mother, and plainly desired and intended not to return to cohabitation, but even then she did not mention her alleged ground of complaint; the Court held that it was impossible not to entertain the suspicion that the desire to be set free from her husband proceeded from the same causes as had rendered her married life unhappy, and that the grievance she ultimately asserted might have been simulated as the sole means of reaching her end, and dismissed her petition. (U. f. c. J. v. J., L. R., 1 P. & D. 460.)

Similarly when a marriage took place in 1863, and the wife became aware of her husband's impotence in 1868, but continued to live with him till 1870, when serious disputes having arisen between them, a deed of separation was executed, and ultimately in 1871 the wife discovered that she had her remedy in the Divorce Court, and instituted her suit; the Court held that her delay and insensibility to the alleged wrong were sufficient of themselves to constitute a bar to relief. (M. f. c. C. v. C., L. R., 2 P. & D. 414.)

In order, then, to obtain a decree of nullity of marriage on the ground of impotence, it is necessary that complaint should be made by the person injured, and that the injury complained of should be the real motive for coming to the Court. It must further appear that the cause of the non-consummation is practically irremovable. It is, however, necessary to show that the impotence is absolutely incurable. A decree will be granted if the Court is satisfied either that the impotence is incurable, or that it is curable only by means which the impotent person will not adopt. Thus, in a case where the parties had cohabited for two years and ten months, and the man's capacity and desire to consummate were not questioned, the Court being satisfied of the bona fides of the suit, and of the practical impossibility

of consummation in consequence of the condition of the woman, pronounced a decree of nullity, although there was no structural defect in the woman. Here, although there was no structural defect in the woman, she was suffering from an excessive sensibility, and, according to the medical evidence, sexual intercourse was practically impossible, owing to this circumstance, unless she adopted the remedies prescribed for her, which she declined to do. The Court held that the absence of a physical structural defect cannot be sufficient to render a marriage valid if it be shown that connection is practically impossible, or even if it be shown that it is only practicable after a remedy has been applied which the husband cannot enforce, and which the wife, whether wilfully or acting under the influence of hysteria, is determined not to submit to, and granted a decree of nullity of marriage accordingly. (G. v. G., L. R. 2 P. & D., 287.)

Similarly in a case where from the medical evidence it appeared that the malformation might possibly, but at a great risk to life, and with doubtful success as to the end desired, be removed, it was held that the petitioner need not call upon the respondent to submit to an operation, and that such a state of things was equivalent to a permanent and irremovable malformation (W. v. H. f. c. W., 2 S. & T. 240).

The impossibility of effecting consummation being the ground of the interference of the Court, it becomes necessary to ascertain the legal significance attaching to consummation. The old libel used to charge an absolute incapacity—"Cœundi propter inhabilitatem penem erigendi"—and I do not know that apter words can be found to describe the legal view of impotence. If sufficient erection can be obtained to admit of penetration being achieved, the man is legally held to be potent without any reference to the question whether the erection has or not been accompanied with emission, although it is evident that without emission the procreation of children is impossible, and the husband little better than an eunuch, in whose case, as we have seen at pages 92 and 93, erection is not unfrequently to be met with. Upon this point I shall presently say a few words, but I will firstly shortly describe the practice of the Court, and then call attention to a recent case in which the respondent was, in my opinion, hardly treated.

Suits for nullity of marriage on the ground of impotence are heard in camera, that is, in the judge's private room without a jury, no one being present except the judge and the parties with their counsel, attorneys, and witnesses, and a short-hand writer.

Previously to the hearing, the parties are inspected by two medical men, appointed by the Court, to ascertain the appearance and condition of their parts of generation. The result of each examination is embodied in a certificate, both certificates being signed by each of the medical men. At the hearing the certificates are produced in evidence, and the medical men examined and cross-examined.¹

The following case, in which I was a witness, seems to illustrate very clearly the points in which I conceive that the law, as at present administered, works injustice, and for that purpose I will ask the attention of my readers to it.

Proceedings had been instituted by a wife against her husband for a decree of nullity of marriage on the ground of his impotence. I was appointed by the Court to conduct the examinations on behalf of the respondent. This gentleman had been previously under my care as a patient, but did not consult me until after his wife had become estranged from him, and withdrawn herself from cohabitation. At that time his general aspect and local condition were as follows:

General aspect.—Stout, but with an unhealthy complexion, considerable hesitation in his speech, betokening some threatened affection of the brain, very nervous, great depression of spirits, digestion bad, fully under the impression that he could not recover, and utterly unable to get through the great press of business which had worried him, and to which he felt quite unequal.

Local condition.—Flaceidity of the organs, no morning erections, oozing of fluid on going to the water-closet, and after micturition unattended with erections. On his consulting me I gave him the following general directions as to the course of life he should follow. I advised him to absent himself from business two or three times a week, to take plenty of exercise in the open air, to be very careful as to his diet, and to be as much as possible in ladies' society.

The local treatment consisted in strengthening the organs by passing bougies with a view to bringing the parts back into a healthy state, and rousing the organs which had fallen into a state of lethargy for want of use. As soon as the parts had by these means become restored to their normal condition, I cauterized the urethra in accordance with the modified practice first introduced by that distinguished surgeon, M. Lallemand, and which is fully described at p. 162, et seq. The eminent Frenchman to whom the profession is indebted for the introduction of this method has always been accustomed to find it most efficacious in restoring power to the sexually weak, and my experience entirely coincides with his; nor did the case now under consideration form in my opinion any exception to the general rule.

1 In examining the petitioner on behalf of the respondent too great precaution cannot be taken. It is better that the petitioner's surgeon should be invited to make the first examination, and to state whether the petitioner is or is not, in his opinion, virgo intacta sed apta viro. This would prevent the possibility of any alleged rupture of the hymen being attributed to the surgeon appointed on behalf of the respondent.

The respondent's appearance and condition at the time of the trial were as follows:—Spirits good, able to attend to his business, feeling equal to any amount of work and enjoying society. He passed through his examination and cross-examination without hesitation; while as regards his local condition, the organs had regained their vigour. Morning erections were experienced, and the escape of semen except under sexual excitement had entirely ceased.

In fact, his progress had been thus far so satisfactory that had it been possible for him to appeal to the congressus—a mode of proof formerly allowed in a neighbouring country—I feel no manner of doubt that he would have passed triumphantly through his ordeal. But no such appeal being possible, and his wife refusing the opportunity which he sought of putting his newly acquired powers to the test, by declining to resume cohabitation, the change in his condition could not for judicial purposes be placed higher than matter of opinion.

Under the circumstances I was necessarily compelled to abstain (in giving my evidence) from asserting that the respondent was absolutely cured, he not having demonstrated his powers by successful connection.

I also felt constrained to admit that, if the wife was unwilling or indifferent, I could not vouch that their intercourse would result in consummation, and further that should any coldness be shown, or no encouragement be given, my patient might still continue impotent. He was to the best of my belief perfectly competent to consummate marriage with a willing wife. In fact, so convinced was I of the restored powers of my patient, that at a consultation attended by all medical men on both sides previously to the hearing, I proposed that cohabitation should be resumed between the parties, and that if consummation did not follow, the respondent should allow the decree to pass without any further opposition on his part. This offer was, however, declined.

The certificates signed by the surgeons representing each party, after examining the petitioner and respondent respectively, were as follows:

THE PRTITIONER'S CERTIFICATE.

1st. That we have examined the parts and organs of generation of M—, otherwise B—, the petitioner in this cause, and that we find the said Octavia M—, otherwise B—, has no hymen or vestiges of one, otherwise she is normally formed in those parts.

We are of opinion that there is no physical impediment on her part to prevent the consummation of marriage.

THE RESPONDENT'S CERTIFICATE.

in this case, and that we find no apparent impediment to the consummation of marriage.

The said B— states he has been for some months under medical treatment, and that he believes he has now the power of consummating marriage.

I append a transcript of the judgment delivered by Sir James Hannen in this case, which will, I apprehend, unless the law can be altered, rule all subsequent cases.

"I am of opinion that I ought to pronounce a decree of nullity of marriage in this case. Where a healthy man and woman sleep together for some considerable time, the presumption is that connection will take place, and if it does not take place, the presumption is that it arises from some inability on the part of the one or the other, if the circumstances are such as to exclude the idea of the absence of connection from the result of wilfulness on the one side or the other. The evidence satisfies me in this case that neither on the one side nor on the other was there any unwillingness to consummate marriage; on the contrary, there was the natural desire on the gentleman's part, as well as on the part of the lady, that the marriage should have its usual results. Now, my view of the effect of the three years' cohabitation rule is this: it does not do in cases of this kind lightly to assume that because the connection has not taken place as speedily as it usually does take place after the marriage, therefore there is physical inability. There is no doubt on the part of the woman frequently, coyness, and exaggerated delicacy, and nervousness, which may interpose obstacles on her side to the consummation; on the other hand there is no doubt, that the very solemnity, I may almost say sanctity, of the relations that have been created between the man and the woman has an effect upon the man's mind, which operates upon his body and prevents for a time, until he recovers the due balance of his mind, the consummation of the marriage. It is right, therefore, that time, and ample time, should be given in order to ascertain whether absence of connection results from one of the temporary causes, or results from a lasting inability on the one side or the other. Now, the three years' rule has been adopted as a time which for all ordinary purposes must put it beyond the doubt of the tribunal having to determine such a matter, that the inability is not of a temporary but of a lasting character. Now that, it is admitted, has been always so considered in the courts having to deal with these matters. That is evidenced clearly by the authorities, and it matters not whether a three years' rule be taken as a hard and fast line in the sense that the three years must elapse, or whether some time something like three years, as in the case before Dr Lushington. It matters not, I say, how that is to be treated, nevertheless, a period something like three years has hitherto been considered sufficient, but, says Dr Deane, we cannot put any arbitrary limit upon the advance of science, we cannot say so far and no further will I believe that is so, but I must not make a particular suitor who comes before me the object of experiment upon such a subject. Whenever, if ever, it shall be established that, though a man has been incapable of sexual intercourse for three years, he has recovered the power, then and then only will the question arise whether or not I should alter the rule which at present prevails; but it is clear that at present it cannot be taken as established that after such a period of time a man who has not had the power during that time will recover it. Sir William Fergusson very properly limited his evidence to a statement that there was a chance of recovery. But I repeat, this lady must not be made to speculate upon chance. With regard to Mr Acton, no doubt he has pronounced a more confident opinion. I suppose, from the nature of the inquiry, he was unable to state with more positiveness that he ever had known a case in which, where there was want of sexual power to have connection during three years, it ever had been restored. Now, hoping very much indeed that he may be right in his view of what may hereafter be discovered, I am not satisfied upon this evidence that there is any reasonable hope that this gentleman will ever recover that power which it is admitted during the three years that he had the opportunity of sexual intercourse with his wife he was not possessed of. I therefore pronounce a decree of nullity of marriage."

I fully admit that both the decree and the reasoning upon which it was based are according to the present state of the law perfectly sound and unimpeachable. My quarrel is not with the decree, though I have no doubt that its effect was to inflict considerable hardship and injustice upon my patient. My complaint is with the faulty state of the law, which compelled a judge so eminent to pronounce a decree, from a medical point of view, so erroneous. The three years' rule is the creation not of medical men but of lawyers, and proceeds upon a misapprehension of the true nature and character of impotence, for which the medical profession is undoubtedly responsible. Inability to consummate marriage, in other words want of erectile power, are treated as synonyms for impotence, whereas these are in truth merely indicia from which, when taken in connection with other circumstances, impotence may be inferred. This confusion of thought unfortunately extends also, as we have seen, to the word impotence itself, under which term various types of disease absolutely different are lumped together and treated as one and the same form of complaint, and that form an incurable one. Impotence is assumed to be an incurable condition, and its existence to be demonstrated by the fact of non-consummation during the period of three years. This is the position on which the three years' rule rests; I confess that it is apparently justified by the prevailing notions both among scientific and unscientific persons; but I venture to think that in proportion as the nature of impotence becomes the subject of further scientific inquiry, the unsoundness of the rule will become apparent. The period is too long, if all that is required is time for the husband to recover his balance of mind, or the wife to abandon her coyness. It is more than sufficiently long, if the man is really impotent, to secure for the wife, perhaps for both, a very wretched existence; it may be too short—if removable cause of mischief exists, and the respondent has not taken steps to obtain competent medical advice. The principle is admitted that if non-consummation—as in the case of the masturbator, p. 236—is attributable not to innate want of power, but to a removable cause, however remote the probability of removal may be, no relief can be given to the complaining party, and this is the true principle by which all the cases should be governed. The true point to be ascertained is not so much whether the marriage is in fact unconsummated, and has remained so during a period of three years, as what the actual condition of the person is, to whose want of capacity the nonconsummation is attributed, and whether the evidence adduced as to his condition holds out any reasonable prospect of his ultimate recovery, if submitted to proper medical treatment. A man capable of consummating marriage is a man possessed of virility; a man incapable is either, one from whom virility is absent, or one in whom virility is in abeyance. Absence of virility is the only condition on which a decree of nullity of marriage should be founded, for to supply this deficiency creation is necessary, and creation is beyond the power of science. Virility in abeyance, on the other hand, may be due to masturbation, want of confidence, feeble crection, and many other causes all more or less susceptible of being remedied by art and skill, and it is unreasonable that the indulgence extended to the masturbator should be withheld from other persons whose cases—while assuredly not less deserving of sympathy—are perhaps more susceptible of cure.

As the law at present stands a man practically impotent may be pronounced efficient, while another capable of becoming efficient may be pronounced incurably impotent. So long as the question of potence or impotence is made to depend solely upon the question—has penetration been effected or not—so long will this unsatisfactory condition of things continue. If it can only be proved, that there is sufficient erectile power in the penis to penetrate and rupture the hymen, no judge would decide such a husband to be impotent, although no emission followed the erection; but, as we have already seen, an eunuch may have erections (p. 92), and this husband may for all

procreative purposes be no better than an eunuch. On the other hand. a man who has morning erections and nocturnal emissions, but is unable to effect complete penetration, may become capable, under proper medical advice, of procreating children (which in the last preceding case must be impossible), and yet, merely because he has not within three years consummated marriage, he is stigmatised as an impotent man unless his failure can be clearly attributed to masturbation.

The present state of the law may be shortly summarised as follows: A man who has well-formed testes and penis and an occasional erection sufficiently strong for penetration—although he has obstruction of both spermatic chords so that ejaculation of semen and consequently impregnation of his wife is impossible, and who consequently, from an anatomical or physiological point of view, is little, if at all, better than an eunuch—is nevertheless legally potent, and his wife can obtain no judicial release from his sterile embraces. A man who has occasional morning erections and nocturnal emissions, and who, medically speaking, is potent or able to become so under treatment, is—if he does not happen within a period of three years from the day of marriage to have effected penetration, unless he should be a masturbator—legally impotent.

A man who masturbates himself, and thus debars himself from ability for sexual intercourse, is legally potent; he may degrade himself and his wife by practising by her side his disgusting habit, and his wife can obtain no judicial separation from her filthy companion. Surely this state of the law is opposed alike to medical science, to common sense, and to common decency, and requires amendment. When we remember that though, in a certain sense, the law is made by lawyers, they can, when dealing with scientific subjects, use in the manufacture such materials only as science supplies, we shall recognise that it is incumbent on the medical profession to diagnose more accurately than has ever yet been done the causes of sexual weakness, and thus enable the lawyers to relieve from the charge of inconsistency and hardship the administration of the law on a point that so materially affects the happiness and welfare of mankind.

In the meantime the lawyers may do something themselves towards placing the law on a more satisfactory footing. Let the principle enunciated in S., f. c. E., v. F., which I have cited above, be a little more generally applied, and much will have been effected. In conjunction with the wider application of this principle it will be necessary also to extend the medical test of impotence. The inspection of the persons both of the man and the woman must be retained, in order to place in the possession of the medical witnesses the information obtainable from physical indications, but the inquiries of the surgeon should

not cease with the inspection. He should apply himself to discover so far as possible the actual condition of the man, paying especial regard to whether or not he then has, or at any time previously, has had morning erections and nocturnal emissions. If as the result of the inquiry, it shall appear that in addition to failure to consummate marriage, he then is, and always has been free from these symptoms, his condition may safely be attributed to absence of virility, and a decree of nullity of marriage on the ground of his impotence will be properly pronounced. If as a result of the inquiry—notwithstanding the non-consummation of marriage—the indications to which I have above referred shall be discovered, equal weight should in my opinion be given to them as to the fact of the failure being attributable to masturbation. In both cases there is possibility of recovering potency, both alike come under my heading of virility in abeyance—in the one case a filthy habit, in the other functional derangement, are the assignable causes of failure; the former is within the power of the will, the latter amenable to medical care and skill; in neither, unless in both, ought a decree of nullity of marriage to be pronounced. I would further suggest that in doubtful cases no decree ought to be pronounced unless it appears that the person charged with impotence has been under competent medical treatment, even although three years may have elapsed without consummation, as in cases where a cure is possible a few weeks are ordinarily sufficient to effect it. The rule I suggest would inflict no appreciable hardship on the petitioner.

The following question has often been put to me by counsel:— "Surely, you do not pretend that a man can be otherwise than impotent who for months or years has cohabited with his wife and slept in the same bed without having had sexual relations with her?" Strange as it may appear, I am satisfied that such a state of things is not only possible, but that it often exists. The fact is, as I have already pointed out (p. 212), that in many women sexual feelings are either very slight or entirely dormant, at all events, until aggressively aroused. If a cold or nervous man should be married to a woman of similar disposition, I know it is quite possible that they may cohabit together and sleep in the same bed for months and years without any sexual intercourse taking place, and it is obvious that every day that passes after the marriage without consummation being attempted, decreases the probability of and even the ability (unless medical treatment is had recouse to) for sexual congress. It often happens that time passes on without the marriage having ever been consummated, and the parties live happily together untroubled by sexual thoughts. At length estrangement arises, mutual disappointment, incompatibility of temper, or poverty, or some other cause intervenes, or perhaps the lady forms an attachment for some other man, and so separation comes

to be desired, a lawyer to be consulted, and a petition for nullity of marriage on the ground of the husband's impotence to be presented. In such a case the non-consummation of the marriage has clearly inflicted no hardship on the wife, and is attributable as much to her own fault as her husband's, and the wife as little deserves to be released from her contract as the husband does to be burdened with an odious stigma as the price of her freedom.

In concluding this part of the subject, I can only express the hope that greater attention, than it has received in the past, may be vouch-safed to it in the future by the medical profession. Assured as I am that just as in former days men were consigned to helpless confinement, as idiots and lunatics, whom proper treatment would have restored to society and usefulness, so now many are condemned to bear the stigma and privations of impotence who are in fact merely the victims of ailments removable by medical care and skill.

Upon these cases, which I consider have hitherto been neglected and misunderstood, I have attempted to throw new light, and I have every reason to hope that in future distinctions will be made between many of these cases of impotence which are now mixed up together, owing to the assumed inability to distinguish between the true and false complaint.

I consider these charges of alleged impotence some of the gravest that can be brought against a man. They, like some other accusations, are easily made, but not so easily disproved.

In my opinion these suits for nullity of marriage are becoming much too common, and I hope the law will cease to countenance some wives in dishonouring instead of honouring the husbands they have sworn to cherish, and this the more especially as a worldly experience teaches me that a woman seldom brings these charges till she has formed another attachment.

¹ I have been told that the instances of women seeking divorce on account of impotence have largely increased of late, the increase reaching the formidable proportion of about 12 to 1 in the course of the last twelve months.

FOURTH PERIOD—ADVANCED LIFE

THE FUNCTIONS AND DISORDERS OF THE REPRO-DUCTIVE ORGANS IN ADVANCED LIFE

PART I

NORMAL FUNCTIONS IN ADVANCED LIFE

My readers will by this time have become aware that in childhood the generative functions should be absolutely quiescent, that even in youth the sexual powers are rather to be husbanded than taxed, and that the adult himself should be chary of exhausting those capacities which nature has given him for the continuance of his species.

We have now to consider these functions, powers, and desires in advanced life; and it will appear that old age resembles youth in this, that, if the elderly man wishes to preserve his intellectual faculties, health, and vigour, and would enjoy a long life, he must be content with, at most, only a very moderate indulgence of the sexual passion. His motto should be, "Deposui arma miles inermis."

Fortunately for the individual, moderation is usually practised. The elderly man has generally learned from experience that the generative function could not have been wisely, or, indeed, duly exercised, before the body had attained its entire development—that it is the test of manhood, the crowning effort of maturity, and that it must diminish with a waning frame. Experience ought to have taught men that we require a sort of vital exuberance, to transmit what may become another being; and this prerogative is given to us only during the prime of our existence."

"Love," Parise,1 that elegant writer, says, "at the decline of life,

1 It has been very much the fashion to decry the French school. That many prurient ideas have been given currency to in La Belle France no one pretends to doubt, but every reader acquainted with French literature must be aware that among its writers exist men who have given most valuable assistance in recommending moral conduct. In this category no one stands more prominently forward than

should take quite a moral character, freed from all its animal propensities. In the elderly man, it is paternal, conjugal, patriotic attachment, which, without being so energetic as the love experienced in youth, still warms old hearts and old age;—and, believe me, these have their sweet privileges, as well as sometimes their bitter realities. These autumn roses are not without perfume—perhaps less intoxicating than that arising from first love, but presenting none of its dangers."

"One of the most important pieces of information which a man in years can attain is, 'to learn to become old betimes,' if he wishes to attain old age. Cicero, we are told, was asked if he still indulged in the pleasures of love. 'Heaven forbid!' replied he, 'I have foresworn it as I would a savage and a furious master.'

"When you see an elderly man, judicious, endowed with firm reason, whose enlightened and active mind is still capable of directing his affairs ably, and making himself useful to society, be convinced that such a man is discreet and continent, and that temperance—so justly called Sophrosyne, the Guardian of Wisdom, by the ancients—has in him a fervent admirer; in fact, he has acquired his perfect moral liberty."—Traité de la Vieillesse, p. 431.

M. Flourens, in his 'La Longévité Humaine,' says—"It is at the turning point of the *physique* that the *morale* enters, in turn, upon its empire—strengthens, expands itself, and gives, as it were, a splendour to the second half of life."

"Age has a much greater effect on physiological than on sentimental love, as the latter has less need of physical force or juvenile exaltation. There are men who, always young in heart and imagination, have towards this pure love a constant devotion which, ever

M. Parise, for many years Secretary to the Royal Academy. I am proud to acknowledge the great advantage I have derived from the perusal of his work on old age. It breathes that spirit of contentment, and is written in such pure and elegant French, that I fear I shall be unable, in many instances, to give the true rendering of the text; but I regret this the less if I shall induce my readers to refer to the original. I am fully convinced they will not be disappointed, but agree with me that, among modern French literature, valuable moral instruction is to be found draped in the most eloquent language.

¹ This saying is attributed to more than one great man of antiquity; to Sophocles, for instance. At the beginning of Plato's Republic, the merry old Cephalus says:

"I was once in company with Sophocles, the poet, when he was asked by some one, 'How do you feel, Sophocles, as to the pleasures of love? Are you still able to enjoy them?' 'Softly, friend,' replied he, 'most gladly indeed have I escaped from these pleasures, as from some furious and savage master.'"

And again of Cato-

"Quam in eo quidam jam affecto ætate quaereret, utereturne rebus venereis Dii meliora" inquit, "s. lubenter vero istinc tanquam domino agresti et furioso profugi."—Cato Maj., c. 47. renewing itself, seems to reanimate instead of exhausting the vital principle."

Parise says—"It is usually at the age of fifty or sixty¹ that the generative function becomes weakened. It is at this period that man, elevated to the sacred character of paternity, and proud of his virile power, begins to remark that power decrease, and does so almost with a feeling of indignation. The first step towards feebleness announces to him, unmistakably, that he is no longer the man he was. He may retard the effect up to a certain point, but not entirely. This law must have its full and entire execution, "dura lex sed lex." The activity of the generative organs diminishes, their functions abate, languish, and then cease entirely. The wish and the want are no longer one and the same thing; the imagination does not exercise its olden power and fascination on these organs.

"Blood now only flows in small quantities towards the testes. Their sensibility becomes blunted, and is reduced to what is sufficient for the nutrition of the parts. The scrotum is observed to become wrinkled and diminished in size, the testicles atrophy, and the complicated vascular tissues which form them become obliterated; the semen, that peculiar secretion of the blood, is not only less abundant, but has lost its consistence and its force. The animalculæ, or zoosperms, which constitute its nature or its essence, far from being as numerous or active as formerly, are, on the contrary, few and languid."

Dr Duplay, physician to the Hospital for Incurables in Paris, states that he examined the generative organs, in order to discover the existence or absence of semen, in 51 old men who died of various acute and chronic diseases, aged from sixty to eighty-six. In 37 he established the presence of spermatozoa, and in the other 14 he was unable to find traces of them. In 27 instances the spermatozoa were perfectly well formed, and similar in every respect to those found in the adult. In the other 10 cases neither the heads of the spermatozoa nor their tails were perfect. The quantity varied greatly. In some old men spermatozoa were as numerous as in adults; in 14 instances they were rare, but still perfectly developed.

Spermatozoa may be found in the whole extent of the vasa deferentia, as happened in 26 instances, or at one point only of the secreting apparatus. Thus, three times only, the semen contained in the vasa deferentia alone showed them; that in the vesiculæ evincing no traces. Once their presence was shown in the liquid of the vesiculæ seminales, and not in that of the vasa deferentia. They were found seven times

¹ The Cardinal Maury is said to have told the celebrated Portal that "a man of sense past fifty ought to give up the pleasures of love, for every time he indulged in them he threw on his head a handful of earth." (Anglice, "drove a nail into his coffin.")

in only one vesicula, four times in the right, and three times in the left to the exclusion of that on the opposite side and of the two deferent canals.

Semen was very abundant in 3 cases, moderately so in 24, and in 10 cases there was but little to be seen.

Semen, then, may be discovered in old men whose testes are atrophied to a considerable extent, and it clearly appears from the above investigations that the secretion of semen takes place in the old man, although slowly, just like that of the saliva, bile, or pancreatic fluid. What proves it is that semen is found in the whole course of the spermatic canal; it is met with not only in the vesiculæ seminales, but in the deferent canals, in the epididymis, and in the testis itself (see Diagram, p. 104, in explanation of this); and the spermatozoa are found likewise in all these situations. It is, therefore, probable that if, among the spermatozoa which the microscope enables us to discover, some date from long antecedent periods, there are others that have been recently formed. The oldest of these twenty-seven persons in whom spermatozoa were found was eighty-two years of age; and the rest were from sixty to eighty-two.

Dr Duplay concludes by saying,—"If old men are not so apt to beget children as adults, their inaptitude depends less on the composition of the semen than it does on a want of the other conditions essential to the reproductive acts."

I would supplement these observations by the statement made to me by several most observant and intelligent elderly persons, who assure me that as they have advanced in life the emission of semen has been attended with absolute pain—a sort of scalding or burning as the fluid passes. This is so great that they dread the occurrence, as it takes away from the pleasure of the act. Does this arise from the muscles aiding in the act very feebly? Can it depend upon the canal being less pervious, or upon a diminution of the accessory fluids which make up the bulk of the semen? I cannot decide, but of the fact I have no doubt.

Should any after this exclaim in reply to my cautions against excesses, as some of my senior patients have, "Why may I not exercise my sexual organs, as your science shows that nature still provides fertile semen?" My answer is, "do not attempt to spend a great deal out of your small capital." Old age cannot support the drain and the subsequent nervous depression arising from ejaculation. Science merely shows that secretion is not absolutely stopped by bountiful nature; it only proves that semen is formed slowly, and with effort, and may remain for a long time pent up in the canals

^{1 &#}x27;Archives Générales de Médecine,' quatrième série, tom. lxxx, Dec., 1852, p. 393.

which have secreted it. I have often occasion to reiterate that professed breeders of animals refuse to rear the produce of old sires or dams, and have learnt to recognise this class of young stock by several marks, as for instance the deeper hollows over the eyes, and by the sunken eye itself. So well are these facts known to horsedealers, that they refuse to purchase young horses presenting these appearances, being convinced that they will not stand work, or turn out well. As far as my experience goes, no doubt can exist that old men may and do retain the power of connection under the influence of certain stimuli. Even intercourse may be, in some healthy old men, frequently repeated. Such men may have children, but experience teaches us that these infants are difficult to rear, they are not the best specimens of the English race. Too many are of a nervous irritable frame, their intellectual qualities are not equal to those of the father. and they suffer as they progress in life from affections of the brain and nervous system. It is an undoubted fact, and is now become generally admitted, that from the moment of conception of the individual the duration of existence is, to a certain extent, pre-determined, in accordance with the organization which he has received. I think all will agree, then, that a human being born with a rich stock of force and vitality will take a greater number of years to arrive at the culmination and the term of his existence, than another born under opposite conditions (even though more favorable as far as worldly externals are concerned). We are, therefore, forced to the conclusion that the children of old men have an inferior chance of life; and facts daily observed confirm our deductions. Look but at the progeny of men who marry late in life, what is its value? As far as I have seen, it is of the worst kind-spoilt childhood, feeble and precocious youth, extravagant manhood, early and premature death.

In speaking thus, however, I must not be supposed to set my face against even elderly men marrying if they will, but let them select a suitable companion. What I object to is December allying itself with May. Daily do I give my sanction to a man advanced in life (but left on the strand, without relations or friends) marrying if he has the wish, and his health is good, and he can select a lady of suitable age. My opinion is, that if such a man avoids marital excesses, the best thing he can do with a view to prolonging life is to marry. Certainly I can say that the results I have witnessed have borne out the correctness of the advice I have given; marriage even late in life has conduced, in numerous instances that have come under my observation, to the happiness and longevity of many elderly people. It is only against injudicious and ill-assorted marriages and consequent injurious excesses that I set my face,

PART II

DISORDERS IN ADVANCED LIFE

From the above remarks we gather that the functions of the generative organs should be husbanded, not abused, in advanced life. Extreme moderation should be inculcated, and the greater the age the greater the moderation. Entire continence—the rule of youth—is hardly less the rule of age. The transgression of this rule, indeed, in age is more fatal than in youth. There is no superabundant stock of vitality to repair its destructive waste of error or extravagance.

The greater part of mankind, however, show excessive feebleness in withstanding the abuse of the generative functions; and what surprises us most is, that those advanced in life are not always the least exposed to this reproach. It is certain that in old age, at a time when the passions should have given way to reason, there are still many individuals who allow themselves to stray imprudently on the very precipitous edge of these dangerous enjoyments. They applaud themselves for postponing moderation till it is rather forced 2 than voluntary; till they stop from sheer want of vigour. What heroic wisdom! Nature, pitiless as she is, will most certainly cause them to pay dearly for the transgression of her laws; and the steady accumulation of diseases soon gives demonstrative proof of it. This result is the more certain and prompt, inasmuch as in these cases excesses are almost always of very old standing. The libertine in advanced years has usually been dissolute in youth and manhood, so that we may trace the progress and calculate the extent of his organic deterioration.

"If we possess ever so little reflective or physiological knowledge of mankind, how can we fail to inculcate rigorously the precepts of continence, more especially as we find them calculated to maintain both the duration and happiness of our life? It is well established that, of all the powers of the economy, no one is lavished upon us by Nature with greater profusion or, at the same time, within more clearly defined limits than this one of generation."

For the purposes of description, I shall, in the following pages, divide the functional diseases in elderly persons in the following manner, premising that it is principally from excesses that those advanced in life suffer. All I have to say may be, I think, included under the following heads which will enable me to arrange some

¹ See observations bearing on this question, at p. 45.

² Some writer has said, "We do not forsake our vices, our vices forsake us."

curious facts which have not hitherto met with that consideration from the profession which their importance deserves:

- 1. Functional disorders in persons who do not know the consequences of repeated acts of sexual intercourse, and commit excesses from ignorance.
- In persons who know the consequences of sexual excesses, but cannot control their passions.
- 8. In débauchés who, hoping to supply the loss of power consequent on their previous excesses, deliberately choose to stimulate the reproductive organs for the purpose of gratifying their animal passions.

CHAPTER I

FUNCTIONAL DISORDERS IN PERSONS WHO DO NOT KNOW THE CONSEQUENCES OF REPEATED ACTS OF SEXUAL INTERCOURSE, AND COMMIT EXCESSES FROM IGNORANCE

It is somewhat curious to notice the naïveté exhibited by elderly gentlemen. Patients from sixty to eighty come to me, complaining that they are not sexually so energetic as they were; that the sexual act is no longer attended with the same degree of pleasure as formerly, They grumble because desire does not come on so frequently, or because, when they attempt the act, they no longer experience perfect erection.

These are among the most difficult patients we have to deal with, and their treatment requires considerable tact and discrimination. I, however, attempt to meet them on their own ground; I inquire at what age they began to indulge the sexual instinct—whether in some official capacity they have not resided in warm or trying climatesand, with proper respect for proprieties, inform myself as to their antecedents. Thus armed, I ask them if they have considered the consequences which they wish me to bring about. I appeal to their common sense, and gently remind them that their symptoms may be slight warnings of the approach of the enemy; that, as old soldiers, they should begin to exercise a little caution. I even dare to recall to their recollection that man has other duties which require his attention besides those of reproduction. I ask them if they have no pleasure in the luxuries of the table, or if they wish so to derange their health that their appetites shall fail. I remind them of the saying of Bichât. "that the organ of taste is the last thread on which hangs the pleasure of living." I repeat a few of the hints I have already detailed; and beg them to look around, and consider if their old friends who marry young wives have improved in health, or if they cannot call to mind some very notable instances of the reverse. It occurs to them, and they do not deny, that this may be even so; and as life, and, above all, life with good health, is fully appreciated by this class of men, they become better satisfied with their position, and often appreciate my motive in thus warning them. When I further remind them that, if nature has interdicted great sexual indulgence, it still has reserved for them many compensating pleasures; and when I hint a little later that there are other and higher enjoyments and duties which their position in society warrants and demands, we usually part pretty good friends. I trust I have in this way been the means of rescuing many a man who has been on the point of damaging his health in ignorance, from the dangers which beset his path, and have preserved his powers for a more prolonged discharge of his higher duties than could, under other circumstances, have been hoped for. Lord Bacon's dictum, "Age doth profit rather in the powers of understanding than in the virtues of the affections," is not only the observation of a fact, but the inculcation of a pregnant moral.

It cannot be concealed that there are persons moving in good society (although fortunately they are few) who come to the surgeon ostensibly for other reasons, but virtually under the belief that he will prescribe something that will excite their flagging powers. I have already alluded at length to these cases, and fully described the language which the profession does and should hold towards them.

In all such cases the man advanced in life should be at once told that, although his powers are somewhat enfeebled, no immediate mischief has occurred (if the surgeon can conscientiously say so)—nature only wants rest, and all will be well. It is of great importance that the sexual fears of the elderly person should be quieted. We have seen, in previous pages, the influence of the imagination on the sexual ideas. As age advances, this effect grows still stronger—it is of primary importance that the morale of a man should be strengthened; and I at once tell these patients most positively, that I can relieve their present sufferings; but if I attempt to renovate their sexual powers, I must exact a promise that after recovery they shall use them with extreme moderation. On no other terms will I undertake the case; for I tell them it is a better guarantee for their life and happiness to remain invalids as they are than to have their organs strengthened and then to kill themselves by inches through fresh fits of excitement. I need hardly say that every upright practitioner refuses to be an accomplice in any way whatever to mere excitement. Libertinage, men should be told, is bad enough at any age; in the elderly man it is a crime, and one that no conscientious surgeon will lend himself to abet. This language held to elderly men is good in more ways than one. It proves to them that their weakened condition depends upon themselves and not upon a dreamy life alone; it "pulls them up" at a moment when they may be disposed to go astray. The assurance that their case is amenable to treatment, if they will only observe the ordinary rules of moderation encourages them to leave the vicious course they may have drifted into, and regain that peace of mind the loss of which preys greatly on the bodily health of such men. No "man of the world" can pretend to be shocked by advice of this kind; many take it in good part, common sense telling them that it is reasonable, and that they must follow it, if they would preserve their health.

Experience has taught me how vastly different is the situation of the class of moderate men, who, having married early, have regularly indulged their passions, at longer and longer intervals, as age has crept upon them, from that of widowers of some years' standing, or of men who have, through the demands of their public or other duties, been separated from their wives for prolonged periods. The former class rarely come under the medical man's care: excesses with them are exceptional, and they are equal to the sexual shock. On the other hand, when the latter class, after leading lives of chastity, suddenly resume sexual intercourse, they are apt to suffer greatly from generative dis-The impression made by sexual excesses on the nervous system, after years of rest, is calculated to impart a shock to any constitution, and this result follows with the greater certainty in those whose nervous powers are already depressed, as for instance, by prolonged residence in the East. These cases require great care, and their successful treatment must mainly depend on the conduct of the patient, who, by irregularities of his own,-which would appear no more than moderate in persons thoroughly sound, -may altogether frustrate every attempt to relieve him.

I was lately consulted by a gentleman of nearly seventy years of age, who, after remaining a widower many years, was captivated by the charms of a young girl. The courtship prospered, the patient was affianced, and all appeared in satisfactory train, when he became alarmed by observing the very frequent recurrence of seminal emissions (to which he had been for years subject occasionally); and worse—which, in fact, brought him to me—these emissions stained his linen with blood, a symptom which gave him great anxiety. I pointed out to him the dangers attending this state of sexual excitement, and assured him that the treatment I should propose would avail little, so long as the excitement under which he was then labouring continued, and that I dreaded the consequences. Circumstances, however, so fell out that the marriage was broken off. My patient soon recovered his health, and he has now occasional nocturnal emissions as before, but unattended with any hæmorrhage.

The medical man may be occasionally consulted by men in years upon the subject of marriage, and he may be asked if they may marry.

In the earlier editions of this book I spoke strongly against such men marrying, and I wrote thus: "I have but one answer to all such questions. Do it on your own responsibility; I cannot give my sanction. If you value life, if you consider your health, if you look for happiness, I advise you to remain as you are. Much as I approve and recommend marriage to the young adult, as strongly would I forbid it to the old man."

Subsequent and more extensive experience, however, has assured me that, in the present state of civilisation, there are many cases in which a man may marry late in life with great advantage. I now submit a patient who desires to marry late in life to a close examination. find him a hale person with a sound constitution, I see no objection to his settling, provided always he selects a suitable person as regards age, position, &c. That which alone I object to, in consideration of his future health and happiness, is his uniting himself with a young, gay or volatile girl. I am quite certain that marriage, even late in life, contributes to a man's longevity, if the woman he chooses is suitable as regards age, disposition, and temper. The observations already made in this chapter particularly apply here. If the newly-married man will but be moderate and commit no excesses of any kind, I am an advocate for his marriage, rather than that he should remain single. The reader should recollect that in these cases the surgeon does not advise all elderly people to marry, but he sees no valid reason why an attachment already formed should be broken off merely because a hale and hearty bridegroom is advanced in life. nizant of many instances of persons who are now living very comfortably and happily who have married late in life. In these instances no ill consequences have happened. If, however, an elderly man is disposed to marry beneath him, or to contract marriage with a young and worldly woman, I think his medical adviser should do all in his power to dissuade and warn him of the danger he is about to incur. Nevertheless, experience teaches us that the advice is but little heeded. I am well aware that many cases can be cited in which men have married late in life, and had families. Undoubted instances of virility at the age of nearly one hundred years are on record; but in these cases the general bodily vigour has been preserved in a very remarkable degree. The ordinary rule seems to be, that sexual power is not retained by the male to any considerable extent after the age of sixty or sixty-five.

The impunity with which some elderly men continue the practice of sexual intercourse is certainly surprising; still, abuse or excess, whichever we may term it, must sooner or later tell its tale. In some, its

effects assume the form of hypochondriasis, followed by all the protean miseries of indigestion; in others, of fatuity; in the more advanced stages, paralysis or paraplegia come on, accompanied by softening of the brain, and its attendant consequences. What in early life was attended by temporary languor, is in age not unusually followed by the train of symptoms alluded to above; and, when we are called in, it is too late to do aught but palliate them.

I am every day becoming more convinced that many of the affections of the brain, under which elderly persons suffer, and to which a certain proportion annually succumb, are caused by excesses committed at a time when the enfeebled powers are unequal to supporting them, and I think it the duty of the medical profession to put such sufferers in possession of these facts. Kind advice and sympathy would thus, I am sure, save the valuable life of many a man who errs from ignorance. Let us listen to the warning voice of one who, as I have before said, has written the best work on the diseases of old age. Parise is inveighing against ill-assorted marriages of elderly persons. "There are great risks run; for in the extreme disparity of age, and oftentimes of condition—as when the man is rich and the girl is young— Nature avenges herself by spreading scandals—doubts about paternity, and domestic troubles; everything is at variance, age, disposition, character, tastes, and amusements. 'What shall I do with him, and what will he do with me?' said a clever young girl of eighteen, whose parents wished her to marry an old gentleman. With regard to health and vital force, it is easy to foresee what will become of them in these unequal marriages, where a young and fresh girl is 'flesh of the flesh' of a man used up from age, and mayhap from excesses. Evidently she commits a suicidal act more or less certain or rapid. On the other hand, experience shows that the elderly man who thus risks his repose and his existence, speedily finds his health grievously affected; and with what justice may not the lines of the poet Hardy be applied to his case-

> "'On ne se servira que d'un même flambeau, Pour te conduire au lit, et du lit au tombeau.'

"Would you," continues Parise, "know the difference between love in youth and in old men? It is this, 'of a truth great folly appertaineth to the first love, but great feebleness to the last.' Hereby hangs a tale, for sudden danger lies in the path, and the siren sings upon the very verge. Blessed should the old man deem himself who can put up with calmness, happiness, and reason, instead of craving after those senile accessions of delirium too often the parents of regret and remorse without end. The chastisement of those who love the sex too much is to love too long. Is Nature silent? 'Tis that she would not speak!

Would you provoke or excite her? It is a crime against her—a crime for which she will some day claim a deep revenge. Why, then, not listen to the voice of Wisdom—for those who sit at her feet, and listen to her awful counsels, shall be delivered from strong passion, and many sore straits, and much folly?"

Let the elderly man, then, pause and reflect, that a human sacrifice, either male or female, is generally bound to the horns of the altar that sanctifies such marriages. In the present state of society, with our manners, passions, miseries, man does not always die—he sometimes destroys himself. And the sort of union I have touched upon is one of the most ingenious devices of men to expedite that natural "wear and tear" by which our vital forces are expended in the course of threescore years and ten.

It was thus I wrote in composing the last edition of this book, and I cannot even now characterise in stronger terms the danger an old man incurs in contracting an unequal marriage than what I have said at page 258.

I see no objection to an elderly man marrying a woman in a rank compatible with his own, and whose age renders it probable that she will not have a large family.

In these cases, excesses are not likely to occur, and I feel convinced that an old bachelor by remaining an old roué may run greater risk than by marrying. In either case I should say avoid excess; but I no longer set my face against marrying late, only against the excesses to which it may lead. Not a few such marriages about which I have been consulted have turned out well, and have led to much mutual domestic happiness.

CHAPTER II

FUNCTIONAL DISORDERS IN PERSONS WHO KNOW THE CONSE-QUENCES OF SEXUAL EXCESSES, BUT CANNOT CONTROL THEIR PASSIONS.

This is a class of persons, the consulting surgeon occasionally meets with, and are deserving of great sympathy. Their passions depend too frequently on a state of excitement over which they themselves have no control, although its origin may be traced to their own excesses. These patients come to ask our assistance, not with any object of obtaining power, but because they suffer from urgent desire, which a careful examination of the case often convinces us is fictitious, and dependent upon some irritation going on in one part or other of the canal. In some persons, a full bladder will occasion it; in others,

irritation about the rectum, proceeding from worms or hæmorrhoids; in others, again, acidity of the urine will induce a morbid craving that is often most distressing to the sufferer. Frequently the affection depends upon neuralgia of the bladder, or stone in that viscus. In other instances, I have seen reason to attribute it to some affection of the skin covering the generative organs, causing local excitement. It is all very well to desire such patients to resist these morbid desires, but until appropriate local treatment is prescribed, there can be little hope of amendment. Some few think that this unnatural excitement is healthy. They pride themselves upon it, appear astonished at the surgeon wishing to remove the cause, and cannot comprehend that their constitutions have been much reduced by the fatigue which the organs have undergone. Ultimately, for the most part, common sense triumphs, and they feel intensely grateful for the relief they obtain.

The surgeon must acknowledge, however, that these affections are frequently very rebellious. The duration of disease, prolonged residence in warm or unhealthy climates, or the fact of the sexual passions having been allowed unrestrained liberty, have often brought the constitution of the elderly man into a very irritable state: still, great amelioration may be surely promised. The means of cure cannot here be dwelt upon. They must depend not only on the particular affection present, but the case must be treated on the ordinary principles of surgery.

CHAPTER III

FUNCTIONAL DISORDERS IN DÉBAUCHÉS WHO, HOPING TO SUPPLY THE LOSS OF POWER CONSEQUENT ON THEIR PREVIOUS EXCESSES, PREFER TO STIMULATE THE REPRODUCTIVE ORGANS FOR THE PURPOSE OF GRATIFYING THEIR ANIMAL PASSIONS.

Again to quote Parise: "Unfortunately there are those who, either more infatuated, more helplessly drifting on the tide of passion, or more depraved, use all their endeavours to realise desires which it is no longer possible to satisfy, unless by a forced compliance of the organs. Not only has the energy—the superfluous vitality of early days—disappeared, but the organic power of reproduction is nearly obliterated. Is all over then? Credat Judæus, non ego. It is now that Venus Impudica lavishes on her used-up votaries her appetising stimulants to vice and debauchery. The imagination, polluted with impurities, seeks pleasure which reason and good sense repudiate. There are instances of debauched and shameless old age which.

deficient in vital resources, strives to supply their place by fictitious excitement; a kind of brutish lasciviousness, that is ever the more cruelly punished by nature, from the fact that the immediately ensuing debility is in direct proportion to the forced stimulation which has preceded it.

"Reduced to the pleasures of recollection, at once passionate and impotent, their sensuality may kill, but cannot satiate. There are such old libertines who are constantly seeking after the means of revivifying their withered, used-up organism, as if that were possible without imminent danger. The law of nature is without appeal. To submit to it is the result of great good judgment, and the reward is speedy. But submission is no invariable rule, and persons of prudence and chastity have but faint conception of the devices to evade it, of the folly, caprice, luxury, immodesty, the monstrous lewdness and indescribable saturnalia of the senses which are the result. surgeon alone knows from the confession of his patients, or surmises from his experience, to what a depth corruption will descend, and the evils which will follow, particularly in large capitals. One of the most common means of excitement employed by these senile Lovelaces is change—variety in the persons they pursue. What is more fatal to the organism? Extreme youth is sacrificed to these shameless old men. The full-blown charms of fine women no longer suffice—thev address themselves to mere children, to the great scandal of our manners, and of all that these victims of debauchery hold dear and sacred. Nevertheless, let it be remarked, it is seldom-very seldomthat punishment comes pede claudo; old age, which disease changes every day into decrepitude-often sudden death, and death that lingers for years, a consequence of cruel infirmities-prove the justice of Nature." (Parise, p. 423.)

It would be well if the above picture, sketched, of course, from Parisian society by a distinguished French physician, were inconsistent with experiences gathered elsewhere.

Regret it as we may, medical men of large experience must acknowledge that human nature presents much the same features under all climates, and that it is in London as elsewhere. Virtue and sin, refinement and vice, appear to me to herd together and to grow intense, pari passú with civilisation.

When a young man, without any redeeming qualities, has run through a career of debauchery, when his adult age is but a new lease of similar associations, the necessity for additional excitement appears to goad him on. Fictitious desires increase, until it is impossible to say where shall be his acme of debauchery, or what devices may be invented by those in his pay "to minister to a mind diseased." This is particularly the case when such a pampered, ill-directed, unre-

strained will is accompanied by unlimited wealth. For such an one, youth, innocence and beauty soon cease to have attraction. Well has it been said of him, that "the beast has destroyed the man." Variety may for a time satisfy or stimulate his failing powers, but not for very long. Local stimulants are tried, and, after a short repetition, these also fail. As a last resource unnatural excitement is had recourse to, and now public decency is forgotten, and we probably find that the first check to the lust of the opulent satyr is his finding himself the hero of some filthy police case—then, maybe, a convict, or a voluntary exile.

As schoolboys we may have been accustomed to wonder at the fables of the grotesque sylvan monsters of antiquity, ignorant of what hideous truths of human nature their half-animal forms were the symbols. Even after sad experience has enlarged our knowledge of the possibilities of vice, few of us, happily, have any idea of how completely these bestial forms of ancient art represent the condition of the satyrs who so notoriously affect the seclusion and the shade of the parks and gardens in modern cities. I question if a prison is not the proper place for such debased individuals. As far as I have noticed their organization, I should say an uncontrolled giving way to the sexual passion has over-excited a brain never very strong. A constant drain on the nervous power has produced an effect which renders its subject indifferent to consequences, provided his all-absorbing pursuit (namely, ministering to the excitement of his sexual passion) can be indulged in. Doubtless, in many instances, the brain has become affected, particularly when there exists a strong hereditary tendency to disease. This, together with deficiency of occupation, has caused many of these victims to their own feelings to make the pandering to their vile desires, and gratification of every sensuality the imagination can devise, the chief occupation of life. The medical man would hardly feel justified in certifying their fitness for a lunatic asylum, as in all other respects their conduct appears to be sane. Observing, as these persons do, all the other usual convenances of society, there is a something about them which marks them as thralls of a debasing pursuit. It is an error, however, to suppose that they often suffer from venereal disease. Your old débauchés know too well the parties they have to deal with, and every precaution is taken to avoid the consequences. They are living and suffering spectres whom, as some clever writer has observed, "Death seems to forget to strike, because he believes them already in the tomb."

I very much question if, with their disordered brains, the fear of punishment will deter such men from crime. These satyrs are reduced to so morbid a condition, that the very chance of exposure seems to add a last stimulus to their debased inclinations. No other reason can, it

seems, be given to explain why these rich old débauchés should choose places of public resort for their vile practices, when all that is there performed could, by the aid of money and existing agencies, be done in secret. It would seem as though stolen sweets and covert joys had lost their charm; and the chance of evading the law had become the fascinating novelty. Hence the risk, the subsequent detection, and the public scandal attendant on practices of those whose penchants have long been known to the police. It is a form of aberration of intellect to which libertinage is subject; and seems to show into what a morass of defilement unrestrained sexual excitement may finally lead its victim.

It may, perhaps, be thought singular to suggest a moral based upon such vile practices as the above, but allusion to them may not be without benefit to those beginning life; and I would say, let those persons take warning who with an active imagination once enter upon a career of vice, and dream that at a certain spot they can arrest their progress. It is an old tale, and often told, that, although the slope of criminality be easy and gradual, it is still "le premier pas qui coûte;"—and he who launches himself on such a course, will acquire, as he goes, velocity and force, until at last he cannot be stayed.

The eloquent words of one of the best writers of modern times, although alluding to another vice, are equally applicable to this:

"Persons not accustomed to examine the motives of their actions, to reckon up the countless nails that rivet the chains of habit, or perhaps being bound by none so obdurate as those I have confessed to, may recoil from this as from an overcharged picture. But what short of such a bondage is it?

"I have seen a print after Corregio in which three female figures are ministering to a man who sits fast bound at the root of a tree. Sensuality is soothing him, evil habit is nailing him to a branch, and repugnance at the same instant of time is applying a snake to his side. In his face is feeble delight, the recollection of the past, rather than the perception of present pleasures, languid enjoyment of evil with utter imbecility to good, a Sybaritic effeminacy, a submission to bondage, the springs of the will gone down like a broken clock, the sin and the suffering co-instantaneous or the latter forerunning the former, remorse preceding action—all this represented in one point of time. When I saw this I admired the wonderful skill of the painter, But when I went away, I wept, because I thought of my own condition.

"Of that there is no hope that it should ever change. The waters have gone over me. But out of the black depths, could I be heard, I would cry to all those who have but set a foot in the perilous flood. Could the youth look into my desolation, and be made to understand what a dreary thing it is when a man shall feel himself going down a precipice with open eyes and passive will—to see his destruction and have no power to stop it, and yet to feel it all the way emanating from himself; to perceive all goodness emptied out of him, and yet not be able to forget a time when it was otherwise; to bear about with him the spectacle of his own self-ruin; could he feel the body of death out of which I cry hourly with feebler and feebler outcry to be delivered."

There is a terrible truthfulness in this description of the depths of

long-indulged evil habit. There is, perhaps, only one lower depth; that in which no remorse, no longing after past self-restraint or purity is felt any more.

Not the least active among the motives that have urged me to write these pages describing the consequences of human depravity, is that of offering frank and kindly warning and advice, which may serve to assist some to conquer in a conflict wherein the consequences of defeat may be so irremediable.

The medical man is, I think, the only person who can foresee, as he probably is the only friend who will dare to point out, the consequences to which a course of vice, such as I have above alluded to, inevitably tends. The companions of the victim are not likely to do so. Once in the vicious circle, he must, sooner or later, find a confident in our profession; it is then that the judicious surgeon may step in, and by firm but feeling language he often can, and, if he can, I need not say he ought to try and put a stop to this career of iniquity. There are moments of regret, there are periods of suffering, when a word of advice can be given; and if the true consequences of unrestrained · licentiousness be urged, the easy descent from comparative happiness and respectability may be arrested, and the ignominious end averted. I admit the difficulty. I am well aware that such interference may be thought impertinent; but no one can so well interfere or has such opportunities of expostulation as the medical man. If he do not, few else can, and no one else will. His duty to his country as a citizen, to his patient as a friend, calls upon him loudly, I think, to act the part of a kind and sympathetic adviser.

With his store of argument based upon experience, and his ample choice of opportunities, it is hard to say how often the well-intentioned professional man may not be the means of saving a fellow-creature from the prison, the poor-house, or the lunatic asylum; and of rescuing from base perversion the noble faculties lent by the Almighty for the fulfilment of His first command to Man.

APPENDIX

A.

Suprà, p. 228 et 229.

PRESCRIPTIONS.

I HAVE thought it better, for many reasons, to collect a few of the more usual prescriptions I employ in an Appendix than to encumber the text with them.

B. Ferri et Quiniæ Citratis, 9ij; Liq. Strychniæ (B. P.), mxl; Syrupi, 3iv; Aq. Chloroformi ad 3iv. M. flat mistura.

A tablespoonful to be taken in a wineglass of water three times a day.

B. Tinct. Valerianæ Ammon., 3j;
Etheris Chlorici, 3j;
Tinct. Aurantii, 3ss;
Aquæ ad 3viij. M. fiat mistura.
An eighth part to be taken two or three times a day.

B. Tinct. Lupuli, ʒviij;
Syrupi Aurantii, ʒiv;
Aquæ ad ʒviij. M. flat mistura.
An eighth part to be taken three times a day.

B. Ext. Ergotæ liquidi, Tinct. Hyoscyami, āā 3ss. M. flat mistura. Thirty drops to be taken in water three times a day.

B. Ext. Ergotæ liquidi,
Tinct. Lupuli, ää 3ss. M. fiat mistura.
Thirty drops to be taken in water three times a day.

B. Sodæ Hypophosph., zvj;
Tinct. Aurant., žj;
Aquæ ad žvj. M.
A dessert-spoonful to be taken three times a day.

B. Ext. Cannabis Indicæ, gr. j;
 Pulv. Glycyrrhizæ, q. suf. M. flat pilula.
 One pill to be taken at bedtime.

B. Ol. Phosphorat., 3j;¹ Ol. Morrhuss, 3vij. M.

A teaspoonful, gradually increased, for a dose.

B. Pil. Phosphori, gr. 1. Mitte xxiv.
One pill three times a day.

B. Acid. Phosph. dilut.,
 Syrup. Zingiberis,
 Syrup. Aurant., āž 3ss. M. flat mistura.

A teaspoonful to be taken three times a day in a wineglass of water.

B. Syrup. Ferri Phosph., 3j; Acid. Phosph. dilut., 3iss; Mist. Acaciæ, 3iij; Tinct. Aurant., 3ss; Aquæ Anethi ad 3viij. M.

Two table-spoonfuls to be taken twice a day, at eleven and four, with a table-spoonful of Cod-liver Oil.

B. Ext. Belladonnæ, gr. \(\frac{1}{4}\);
Pulv. Glycyrrhizæ q. s. ft. pilula. Mitte xij.
One pill to be taken at night.

B. Tinct. Cantharidis, 3iss;
 Sp. Lavandulæ co., 3j;
 Ætheris Chlorici, 3j;
 Aquæ ad 3viij. M. flat mistura.

Two table-spoonfuls to be taken three times a day; at eleven, four, and at bedtime.

B. Chloralis Hydratis, 3j; Syrupi Aurantii, 3j; Tinct. Aurantii, 3iv; Aquæ ad 3iij. M.

A dessert-spoonful for a dose.

In cases where a local stimulant is necessary, I have found the following answer well:

B. Linim. Sinapis comp., 3ss;
 Eau de Cologne, 3j. M. fiat embrocatio.

¹ B. Phosphori, gr. vj; Ol. Amygdalæ, 3j. M. Pruss. Ph.

CRITICISMS OF THE MEDICAL PRESS

ON

FORMER EDITIONS OF THIS WORK

'The British and Foreign Medico-Chirurgical Quarterly Review,' July, 1857

"We think Mr. Acton has done good service to society by grappling manfully with sexual vice, and we trust that others, whose position as men of science and teachers enable them to speak with authority, will assist in combating and arresting the evils which it entails, and thus enable man to devote more enduring energies and more lofty aims to the advancement of his race, and to the service of his

We are of opinion that the spirit which pervades it is one that does credit equally to the head and to the heart of the author."

'The Lancet,' May 30th, 1857

"The only way by which some of the most important functional ailments and aberrant physiologic states affecting humanity can be rescued from the grasp of the most disgusting and villainous quackery, and treated with benefit to the patient, is by the scientific and conscientious practitioner openly taking them

reased with benefit to the patient, is by the scientific and conscientious practitioner openly taking them under his own charge.

"Now, however, that legitimate and able practitioners permit themselves to be known as willing to bestow as much consideration on the aberrations of the generative function as on those of any other, we trust that some atoppage will be put to the basest system of plunder ever conducted under the mask of 'medical advice.'

"It at the contract of the patient of the property and the prop

"In the work now before us, all essential detail upon its subject matter is clearly and scientifically given. We recommend it accordingly, as meeting a necessary requisition of the day, refusing to join in that opinion which regards the consideration of the topics in question as beyond the duties of the medical practitioner."

'The Medical Times,' May 16th, 1857

"Mr. Acton has devoted himself for many years with unwearying assiduity to the study of the diseases of the reproductive organs, and after an intimate acquaintance with syphilitic diseases gained in the Clinique of M. Ricord, he has pursued in this country the same series of researches as those which he commenced under that distinguished specialist. Indeed, with Mr. Acton, the investigation of every circumstance connected with the generative function has been a labour of love; and we accordingly find that whether as regards the structure, the functions, or the diseases of the organs in question, every circumstance has received the minutest attention. .

received the minutest attention.

"On the subjects of Impotence and Spermatorrhoa, those bugbears of so many weak and foolish persons, and sources of inexhaustible wealth to the quack fraternity, Mr. Acton discourses with good sense, and indignantly exposes the nefarious tricks of the scoundrels who, on the pretence of curing a disease which often exists only in imagination, extract enormous sums from their unwary victims. He seems to regard the spermatorrhoa-phobia, as we may term it, to be a species of monomania, in which light we ourselves are inclined to regard it; but he judiciously advises that to a patient labouring under this form of mental malady, the tone adopted should be one of sympathy and attention, not of ridicule or disbelief; and that by the employment of appropriate moral and therapeutical means, the morbid terrors of the imagination may be dispelled, and a healthy and hopeful tone of mind be restored."

'La Gazette Medicale de Paris,' July, 1868, in Reviewing the French Translation of Mr. Acton's book, says:

"Trois éditions ont consacré en Angleterre le succès de cet excellent ouvrage. Le public français n'en verra pas la traduction avec indifférence. La raison, qui purifie tout ce qu'elle peut atteindre, quand elle est vivifiée par un rayon d'amour, la raison a inspiré l'auteur admirablement, lui donnant à la fois et l'intelligence vraie de la matière et le ton convenable pour la traiter. Partout un langage simple, clair, décent sans pruderie, exprimant toutes choses en termes appropriée et sans reticences. Il n'y a, en vérité, qu'un anglais qui puisse entrer dans l'étude de ces questions épineuses et formidables, sans céder jamais à la tentation d'étaler quelque bonne pièce d'éloquence.

a la rentation d'etaler queique sonne piece d'eloquence.

"Les praticiens spécialistes ne sauraient suivre un meilleur guide que le docteur Acton pour le traitement des lésions des organes génito-urinaires, et en l'imitant dans sa pratique, ils feraient sagement de lui emprunter quelques-unes de ces vues générales, qui élargissent le champ de l'observation, fécondent les résultats de l'expérience, et font qu'une spécialité n'est jamais étroite,"



London, New Burlington Street, June, 1875.

SELECTION

FROM

MESSRS J. & A. CHURCHILL'S General Catalogue

COMPRISING

ALL RECENT WORKS PUBLISHED BY THEM

ON THE

ART AND SCIENCE

OF

MEDICINE

INDEX

PAGE	PAGE
Acton on the Reproductive Organs . 8	Cooper's Surgical Dictionary 5
— on Prostitution 8	Cotton on Phthisis and the Stethoscope 14
Adams (W.) on Clubfoot 6	Coulson on Syphilis 8
- (R.) on Rheumatic Gout . 17	— on Stone in the Bladder . 8
Allen on Aural Catarrh 5	Dalby on the Ear 5
Allingham on Diseases of Rectum . 6	Day on Children's Diseases 12
Anatomical Remembrancer 11	De Morgan on the Origin of Cancer 18
Anderson (McC.) on Eczema 19	De Valcourt on Cannes
- (McC.) on Parasitic Affec-	Dobell's Lectures on Winter Cough . 14
tions 19	- First Stage of Consumption 14
— (A. F.) Photographs of Le-	Domville's Manual for Hospital Nurses 13
prosy 19	Druitt's Surgeon's Vade-Mecum . 4
Arnott on Cancer	Dunglison's Dictionary of Medical
Aveling's English Midwives 13	Science
Barker's Puerperal Diseases	Elam on Cerebria
	Ellis's Manual of Diseases of Children 11
	Fayrer's Observations in India 4
	Fergusson's Practical Surgery 4
	Fenwick's Guide to Medical Diagnosis 10
	— on the Stomach, &c 16
	Flower's Nerves of the Human Body 10
	Foster's Clinical Medicine 11
Bellamy's Guide to Surgical Anatomy 10	Frey's Histology and Histo-Chem-
Bennet's Winter and Spring on the Mediterranean 15	istry of Man 9
	Gamgee on Fractures of the Limbs 5
- Treatment of Pulmonary Con-	Gant on the Science and Practice of
sumption	Surgery 4
Bennett on Cancerous and other Intra- thoracic Growths	— on the Irritable Bladder 7
	Garrett on Irritative Dyspepsia . 15
	Gaskoin on Psoriasis or Lepra 19
78	Glenn on the Laws affecting Medical
	Men
Bradley's Comparative Anatomy and Physiology 10	
	Hamilton on Syphilitic Osteitis and
	Periostitis 8 Hancock's Surgery of Foot and Ankle 6
Dijuno i Lincolco el Runge-j	
Buchanan's Circulation of the Blood 8 Bucknill and Tuke's Psychological	Harley on the Urine
Medicine	— Diseases and Injuries of the
Buzzard on Syphilitic Nervous Affec-	Jaws 5
tions 8	- Practical Anatomy 10
Carpenter's Human Physiology 9	Holden's Human Osteology 9
Carter on the Structure of Calculi . 7	— Dissections 9
— on Mycetoma	Holt on Stricture of the Urethra . 7
Cauty on Diseases of the Skin	Holthouse on Hernial and other
Chambers on the Indigestions 17	Tumours 6
Chapman on Neuralgia 17	Hood on Gout, Rheumatism, &c 17
Chavasse's Advice to a Mother 12	Hooper's Physician's Vade-Mecum . 11
— Counsel to a Mother . 12	Horton's Diseases of Tropical Cli-
- Advice to a Wife 12	mates 16
Clark's Outlines of Surgery 4	Huth's Marriage of Near Kin 9
- Surgical Diagnosis 5	Jones (C. H.) and Sieveking's Patho-
Clarke's Autobiographical Recollec-	logical Anatomy 10
tions	— (C. H.) on Functional Nervous
Clay's Obstetric Surgery	Disorders 17
Cobbold on Worms	- (Wharton) Ophthalmic Medi-
Coles' Dental Mechanics	cine and Surgery 22
Com - communication and a 20	1

PAGE	PAGE
Jordan's Treatment of Surgical In-	Smith (E.) on Wasting Diseases of
flammations 6	Children 11
- Surgical Inquiries 6	Smith's Dental Anatomy 23
Kennion's Springs of Harrogate . 15	Spender on Ulcers of Lower Limbs . 19
Lee (H.) Practical Pathology 8	Squire's Temperature Observations . 18
Leared on Imperfect Digestion 17	Steiner's Diseases of Children 12
Liebreich's Atlas of Ophthalmoscopy 21	Stowe's Toxicological Chart 20
Liveing on Megrim, &c	Swain on the Knee-Joint 6
Mackenzie on Growths in the Larynx 15	— Surgical Emergencies 4
— on Hoarseness 15	Swayne's Obstetric Aphorisms 13
- Throat Hospital Pharma-	Taylor's Principles of Medical Juris-
copœia 15	prudence 20
Macnamara on Diseases of the Eye . 21	- Manual of Medical Juris-
Marsden on certain Forms of Cancer 18	
Maunder's Operative Surgery 4	prudence
	Thompson on Stricture of Urethra . 7
	— on Practical Lithotomy and Lithotrity
	- on Diseases of the Urinary
Paton on Action and Sounds of Heart 14	Organs 7
Parkes' Manual of Practical Hygiene 21	on Diseases of the Prostate 7
- Issue of a Spirit Ration . 17	Thorowgood on Asthma 14
Parkin's Epidemiology 23	— on Materia Medica . 11
Pavy on Food and Dietetics 16	Tibbits' Medical Electricity 21
Peacock on Valvular Disease of the	Tilt's Uterine Therapeutics 13
Heart 14	- Change of Life 13
- on Malformations of the	— Health in India 16
Heart 14	Tomes' Dental Surgery 23
Phillips' Materia Medica and Thera-	Tuke on the Influence of the Mind
peutics	upon the Body 20
Pirrie's Principles and Practice of	Van Buren on Diseases of the Genito-
Surgery 4	Urinary Organs 8
Power on Diseases of the Eye 23	Veitch's Handbook for Nurses 13
Ramsbotham's Obstetric Medicine	Wahltuch's Materia Medica 11
and Surgery 13	Walker on Egypt as a Health Re-
Reynolds' Uses of Electricity 21	sort
Richardson's Practical Physic 11	Walton's Diseases of the Eye 22
Ross's Graft Theory of Disease 23	Ward on Affections of the Liver . 16
Royle and Headland's Manual of	Waring's Practical Therapeutics . 11
Materia Medica 11	— Bazaar Medicines of India . 16
Sabben and Browne's Handbook of	Waters on Diseases of the Chest . 14
Law and Lunacy 20	Wells (Soelberg) on Diseases of the
Salt's Medico-Electric Apparatus . 20	Eye 22
Sanderson's Physiological Handbook . 9	— Long, Short, and Weak Sight. 22
Sankey on Mental Diseases 20	- (Spencer) on Diseases of the
Savage on the Female Pelvic Organs 5	Ovaries 13
Savory's Domestic Medicine 13	Wife's Domain 14
Schroeder's Manual of Midwifery . 13	Wilks' Pathological Anatomy 10
Shapter's Diseases of the Heart . 14	Wilson (E.) Anatomist's Vade-Mecum 9
Shaw's Medical Remembrancer . 10	— on Diseases of the Skin . 18
Sheppard on Madness 20	- Lectures on Ekzema 18
Sibson's Medical Anatomy 9	 Lectures on Dermatology . 18
Sieveking's Medical Adviser in Life	- (G.) Handbook of Hygiene . 21
Assurance 19	Winslow's Obscure Diseases of the
Smith (H.) on the Surgery of the	Brain and Mind 20
Rectum 6	Wolff on Zymotic Diseases 23
	· .

THE PRACTICE OF SURGERY:

a Manual by Thomas Bryant, F.R.C.S., Surgeon to Guy's Hospital. Crown 8vo, with 507 Engravings, 21s. [1879]

THE PRINCIPLES AND PRACTICE OF SURGERY

by WILLIAM PIRRIE, F.R.S.E., Professor of Surgery in the University of Aberdeen. Third Edition, 8vo, with 490 Engravings, 28s. [1873]

A SYSTEM OF PRACTICAL SURGERY

by Sir WILLIAM FERGUSSON, Bart., F.R.C.S., F.R.S., Serjeant-Surgeon to the Queen. Fifth Edition, 8vo, with 463 Engravings, 21s.
[1870]

OPERATIVE SURGERY

by C. F. MAUNDER, F.R.C.S., Surgeon to the London Hospital, formerly Demonstrator of Anatomy at Guy's Hospital. Second Edition, post 8vo, with 164 Engravings, 6s.

THE SURGEON'S VADE-MECUM

by ROBERT DRUITT. Tenth Edition, fcap. 8vo, with numerous Engravings, 12s. 6d. [1870.]

THE SCIENCE AND PRACTICE OF SURGERY:

a complete System and Textbook by F. J. Gant, F.R.C.S., Surgeon to the Royal Free Hospital. 8vo, with 470 Engravings, 24s. [1871]

OUTLINES OF SURGERY AND SURGICAL PATHOLOGY

including the Diagnosis and Treatment of Obscure and Urgent Cases, and the Surgical Anatomy of some Important Structures and Regions, by F. Le Gros Clark, F.R.S., Consulting Surgeon to St. Thomas's Hospital. Second Edition, Revised and Expanded by the Author, assisted by W. W. WAGSTAFFE, F.R.C.S., Assistant-Surgeon to, and Joint-Lecturer on Anatomy at, St. Thomas's Hospital. 8vo, 10s. 6d.

CLINICAL AND PATHOLOGICAL OBSERVATIONS IN INDIA

by J. FAYRER, C.S.I., M.D., F.R.C.P. Lond., F.R.S.E., Honorary Physician to the Queen. 8vo, with Engravings, 20s. [1873]

SURGICAL EMERGENCIES

together with the Emergencies attendant on Parturition and the Treatment of Poisoning: a Manual for the use of General Practitioners, by WILLIAM P. SWAIN, F.R.C.S., Surgeon to the Royal Albert Hospital, Devonport. Fcap. 8vo, with 82 Engravings, 6s. [1874].

MINOR SURGERY AND BANDAGING

a Manual for the Use of House-Surgeons, Dressers, and Junior Practitioners, by Christopher Heath, F.R.C.S., Surgeon to University College Hospital. Fourth Edition, fcap 8vo, with 74 Engravings, 5s. 6d.

BY THE SAME AUTHOR,

INJURIES AND DISEASES OF THE JAWS:

JACKSONIAN PRIZE ESSAY. Second Edition, 8vo, with 164 Engravings, 12s. [1872]

DICTIONARY OF PRACTICAL SURGERY

and Encyclopædia of Surgical Science, by SAMUEL COOPER. New Edition, brought down to the present Time by SAMUEL A. LANE, Consulting Surgeon to St. Mary's and to the Lock Hospitals; assisted by various Eminent Surgeons. 2 vols. 8vo, 50s.

THE FEMALE PELVIC ORGANS

(the Surgery, Surgical Pathology, and Surgical Anatomy of), in a Series of Coloured Plates taken from Nature: with Commentaries, Notes, and Cases, by Henry Savage, M.D. Lond., F.R.C.S., Consulting Physician to the Samaritan Free Hospital. Second Edition, 4to, £1 11s. 6d.

FRACTURES OF THE LIMBS

(Treatment of) by J. Sampson Gamgee, Surgeon to the Queen's Hospital, Birmingham. 8vo, with Plates, 10s. 6d. [1871]

DISEASES AND INJURIES OF THE EAR

by W. B. DALBY, F.R.C.S., M.B., Aural Surgeon and Lecturer on Aural Surgery at St. George's Hospital. Crown 8vo, with 21 Engravings, 6s. 6d.

AURAL CATARRH;

or, the Commonest Forms of Deafness, and their Cure, by PETER ALLEN, M.D., F.R.C.S.E., late Aural Surgeon to St. Mary's Hospital. Second Edition, crown 8vo, with Engravings, 8s. 6d.

PRINCIPLES OF SURGICAL DIAGNOSIS

especially in Relation to Shock and Visceral Lesions, Lectures delivered at the Royal College of Surgeons by F. LE GROS CLARK, F.R.C.S., Consulting Surgeon to St. Thomas's Hospital. 8vo, 10s. 6d.

CLUBFOOT:

its Causes, Pathology, and Treatment; being the Jacksonian Prize Essay by Wm. Adams, F.R.C.S., Surgeon to the Great Northern Hospital. Second Edition, 8vo, with 106 Engravings and 6 Lithographic Plates, 15s.

INJURIES AND DISEASES OF THE KNEE-JOINT

and their Treatment by Amputation and Excision Contrasted: Jacksonian Prize Essay by W. P. Swain, F.R.C.S., Surgeon to the Royal Albert Hospital, Devonport. 8vo, with 36 Engravings, 9s. [1869]

DEFORMITIES OF THE HUMAN BODY:

a System of Orthopædic Surgery, by BERNARD E. BRODHURST, F.R.C.S., Surgeon to the Royal Orthopædic Hospital. 8vo, with Engravings, 10s. 6d. [1871]

OPERATIVE SURGERY OF THE FOOT AND ANKLE

by Henry Hancock, F.R.C.S., Consulting Surgeon to Charing Cross Hospital. 8vo, with Engravings, 15s. [1873]

THE TREATMENT OF SURGICAL INFLAMMATIONS

by a New Method, which greatly shortens their Duration, by FURNEAUX JORDAN, F.R.C.S., Professor of Surgery in Queen's College, Birmingham. 8vo, with Plates, 7s. 6d.

BY THE SAME AUTHOR,

SURGICAL INQUIRIES

With numerous Lithographic Plates. 8vo, 5s.

[1873]

HERNIAL AND OTHER TUMOURS

of the Groin and its Neighbourhood, with some Practical Remarks on the Radical Cure of Ruptures, by C. Holthouse, F.R.C.S., Surgeon to the Westminster Hospital. 8vo, 6s. 6d.

THE SURGERY OF THE RECTUM:

Lettsomian Lectures by HENRY SMITH, F.R.C.S., Surgeon to King's. College Hospital. Third Edition, fcap 8vo, 3s. 6d. [1871]

FISTULA, HÆMORRHOIDS, PAINFUL ULCER,

Stricture, Prolapsus, and other Diseases of the Rectum: their Diagnosis and Treatment, by Wm. Allingham, F.R.C.S., Surgeon to St. Mark's Hospital for Fistula, &c., late Surgeon to the Great Northern Hospital. Second Edition, 8vo, 7s.

.THE URINE AND ITS DERANGEMENTS

with the Application of Physiological Chemistry to the Diagnosis and Treatment of Constitutional as well as Local Diseases. Lectures by George Harley, M.D., F.R.S., F.R.C.P., formerly Professor in University College. Post 8vo, 9s.

STRICTURE OF THE URETHRA

and Urinary Fistulæ; their Pathology and Treatment: Jacksonian Prize Essay by Sir Heney Thompson, F.R.C.S., Surgeon-Extraordinary to the King of the Belgians. Third Edition, 8vo, with Plates, 10s.

BY THE SAME AUTHOR,

PRACTICAL LITHOTOMY AND LITHOTRITY;

or, An Inquiry into the best Modes of removing Stone from the Bladder. Second Edition, 8vo, with numerous Engravings. 10s. [1871]

ALSO,

DISEASES OF THE URINARY ORGANS

(Clinical Lectures). Third Edition, crown 8vo, with Engravings, 6s.
[1878]

ALSO,

DISEASES OF THE PROSTATE:

their Pathology and Treatment. Fourth Edition, 8vo, with numerous Plates, 10s.

STRICTURE OF THE URETHRA

(the Immediate Treatment of), by BARNARD HOLT, F.R.C.S., Consulting Surgeon to the Westminster Hospital. Third Edition, 8vo, 6s.

KIDNEY DISEASES, URINARY DEPOSITS

and Calculous Disorders by LIONELS. BEALE, M.B., F.R.S., F.R.C.P., Physician to King's College Hospital. Third Edition, 8vo, with 70 Plates, 25s.

. THE IRRITABLE BLADDER:

its Causes and Treatment, by F. J. GANT, F.R.C.S., Surgeon to the Royal Free Hospital. Third Edition, crown 8vo, with Engravings, 6s. [1872]

RENAL DISEASES:

a Clinical Guide to their Diagnosis and Treatment by W. R. BASHAM, M.D., F.R.C.P., Senior Physician to the Westminster Hospital. Post 8vo, 7s. [1870]

BY THE SAME AUTHOR,

THE DIAGNOSIS OF DISEASES OF THE KIDNEYS

(Aids to). 8vo, with 10 Plates, 5s.

[1872]

MICROSCOPIC STRUCTURE OF URINARY CALCULI

by H. V. Carter, M.D., Surgeon-Major, H.M.'s Bombay Army. 8vo, with 4 Plates, 5s. [1873]

RENAL, URINARY, AND REPRODUCTIVE ORGANS

(Functional Diseases of) by D. CAMPBELL BLACK, M.D., L.R.C.S. Edin., Member of the General Council of the University of Glasgow. 8vo. 10s. 6d.

THE REPRODUCTIVE ORGANS

in Childhood, Youth, Adult Age, and Advanced Life (Functions and Disorders of), considered in their Physiological, Social, and Moral Relations, by WILLIAM ACTON, M.R.C.S. Fifth Edition, 8vo, 12s.

[1871]

BY THE SAME AUTHOR.

PROSTITUTION:

Considered in its Moral, Social, and Sanitary Aspects. Second Edition, 8vo, 12s. [1889]

PRACTICAL PATHOLOGY:

containing Lectures on Suppurative Fever, Diseases of the Veins, Hæmorrhoidal Tumours, Diseases of the Rectum, Syphilis, Gonorrheal Ophthalmia, &c., by Heney Lee, F.R.C.S., Surgeon to St. George's Hospital. Third Edition, in 2 vols. 8vo, 10s. each.

•GENITO-URINARY ORGANS, INCLUDING SYPHILIS

A Practical Treatise on their Surgical Diseases, designed as a Manual for Students and Practitioners, by W. H. VAN BUREN, M.D., Professor of the Principles of Surgery in Bellevue Hospital Medical College, New York, and E. L. KEYES, M.D., Professor of Dermatology in Bellevue Hospital Medical College, New York. Royal 8vo, with 140 Engravings, 21s.

SYPHILITIC NERVOUS AFFECTIONS

(Clinical Aspects of) by THOMAS BUZZARD, M.D., F.B.C.P. Lond., Physician to the National Hospital for Paralysis and Epilepsy. Post 8vo, 5s. [1874]

SYPHILIS

A Treatise by Walter J. Coulson, F.R.C.S., Surgeon to the Lock Hospital. 8vo, 10s. [1869]

BY THE SAME AUTHOR,

STONE IN THE BLADDER:

Its Prevention, Early Symptoms, and Treatment by Lithotrity. 8vo, 6s. [1868]

SYPHILITIC OSTEITIS AND PERIOSTITIS

Lectures by John Hamilton, F.R.C.S.I., Surgeon to the Richmond Hospital and to Swift's Hospital for Lunatics, Dublin. 8vo, with Plates, 6s. 6d.

THE CIRCULATION OF THE BLOOD

(Forces which carry on) by ANDREW BUCHANAN, M.D., Professor of Physiology in the University of Glasgow. Second Edition, 8vo, with Engravings, 5s. [1874]

PRINCIPLES OF HUMAN PHYSIOLOGY

by W. B. CARPENTER, M.D., F.R.S. Seventh Edition by Mr. HENRY POWER. 8vo, with nearly 300 Illustrations, 28s.

PHYSIOLOGICAL LABORATORY

(Handbook for the) by E. Klein, M.D., formerly Privat-Docent in Histology in the University of Vienna, Assistant Professor in the Pathological Laboratory of the Brown Institution, London; J. Burdon-Sanderson, M.D., F.R.S., Professor of Practical Physiology in University College, London; Michael Foster, M.D., F.R.S., Fellow of, and Prælector of Physiology in, Trinity College, Cambridge; and T. Lauder Brunton, M.D., D.Sc., Lecturer on Materia Medica in the Medical College of St. Bartholomew's Hospital; edited by J. Burdon-Sanderson. Svo, with 123 Plates, 24s.

HISTOLOGY AND HISTO-CHEMISTRY OF MAN

A Treatise on the Elements of Composition and Structure of the Human Body, by Heinrich Frey, Professor of Medicine in Zurich. Translated from the Fourth German Edition by ARTHUR E. J. BARKER, Surgeon to the City of Dublin Hospital; Demonstrator of Anatomy, Royal College of Surgeons, Ireland. And Revised by the Author. 8vo, with 608 Engravings, 21s.

THE MARRIAGE OF NEAR KIN

Considered with respect to the Laws of Nations, Results of Experience, and the Teachings of Biology, by Alfred H. Huth. 8vo, 14s. [1875]

HUMAN OSTEOLOGY:

with Plates, showing the Attachments of the Muscles, by LUTHER HOLDEN, F.R.C.S., Surgeon to St. Bartholomew's Hospital. Fourth Edition, 8vo, 16s.

BY THE SAME AUTHOR.

THE DISSECTION OF THE HUMAN BODY

(A Manual). Third Edition, 8vo, with Engravings, 16s.

[1868]

MEDICAL ANATOMY

by Francis Sibson, M.D., F.R.C.P., F.R.S., Consulting Physician to St. Mary's Hospital. Imp. folio, with 21 coloured Plates, cloth, 42s.; half-morocco, 50s. [Completed in 1869]

THE ANATOMIST'S VADE-MECUM:

a System of Human Anatomy by Erasmus Wilson, F.R.C.S., F.R.S. Ninth Edition, by Dr. G. Buchanan, Professor of Anatomy in Anderson's University, Glasgow. Crown 8vo, with 371 Engravings, 14s.

THE STUDENT'S GUIDE TO MEDICAL DIAGNOSIS

by Samuel Fenwick, M.D., F.R.C.P., Assistant Physician to the London Hospital. Third Edition, fcap 8vo, with 87 Engravings, 6s. 6d. [1873]

A MANUAL OF MEDICAL DIAGNOSIS

by A. W. Barclay, M.D., F.R.C.P., Physician to, and Lecturer on Medicine at, St. George's Hospital. Third Edition, fcap 8vo, 10s. 6d.

THE MEDICAL REMEMBRANCER;

or, Book of Emergencies. Fifth Edition by JONATHAN HUTCHINSON, F.R.C.S., Senior Surgeon to the London Hospital. 32mo, 2s. 6d. [1867]

PRACTICAL ANATOMY:

a Manual of Dissections by Christopher Heath, F.R.C.S., Surgeon to University College Hospital. Third Edition, fcap. 8vo, with 226 Engravings, 12s. 6d. [1874]

PATHOLOGICAL ANATOMY

Lectures by Samuel Wilks, M.D., F.R.S., Physician to, and Lecturer on Medicine at, Guy's Hospital; and Walter Moxon, M.D., F.R.C.P., Physician to, and Lecturer on Materia Medica at, Guy's Hospital. Second Edition, 8vo, with Plates, 18s.

PATHOLOGICAL ANATOMY

A Manual by C. HANDFIELD JONES, M.B., F.R.S., Physician to St. Mary's Hospital, and EDWARD H. SIEVEKING, M.D., F.R.C.P., Physician to St. Mary's Hospital. Edited by J. F. PAYNE, M.D., F.R.C.P., Assistant Physician and Demonstrator of Morbid Anatomy at St. Thomas's Hospital. Second Edition, crown 8vo, with nearly 200 Engravings, 16s.

DIAGRAMS OF THE NERVES OF THE HUMAN BODY

Exhibiting their Origin, Divisions, and Connexions, with their Distribution, by WILLIAM HENRY FLOWER, F.R.S., Conservator of the Museum of the Royal College of Surgeons. Second Edition, roy. 4to, 12s.

COMPARATIVE ANATOMY AND PHYSIOLOGY

A Manual by S. MESSENGER BRADLEY, F.R.C.S., Senior Assistant-Surgeon to the Manchester Royal Infirmary. Third Edition, post 8vo, with 61 Engravings, 6s. 6d.

STUDENT'S GUIDE TO SURGICAL ANATOMY:

a Text-book for the Pass Examination, by E. Bellamy, F.R.C.S., Senior Assistant-Surgeon and Lecturer on Anatomy at Charing Cross Hospital. Fcap 8vo, with 50 Engravings, 6s. 6d. [1873]

THE ANATOMICAL REMEMBRANCER;

or, Complete Pocket Anatomist. Seventh Edition, 32mo, 3s. 6d. [1872]

PRACTICAL THERAPEUTICS

A Manual by E. J. WARING, M.D., F.R.C.P. Lond. Third Edition, fcap 8vo, 12s. 6d. [1871]

HOOPER'S PHYSICIAN'S VADE-MECUM:

or, Manual of the Principles and Practice of Physic, Ninth Edition by W. A. Guy, M.B., F.R.S., and John Harley, M.D., F.R.C.P. Fcap 8vo, with Engravings, 12s. 6d. [1874]

CLINICAL MEDICINE

Lectures and Essays by Balthazar Foster, M.D., F.R.C.P. Lond., Professor of Medicine in Queen's College, Birmingham. 8vo, 10s. 6d.

DISCOURSES ON PRACTICAL PHYSIC

by B. W. RICHARDSON, M.D., F.R.C.P., F.R.S. 8vo, 5s.

[1871]

MATERIA MEDICA

A Manual by J. F. ROYLE, M.D., F.R.S., and F. W. HEADLAND, M.D., F.R.C.P. Fifth Edition, fcap 8vo, with numerous Engravings, 12s. 6d.

A DICTIONARY OF MATERIA MEDICA

and Therapeutics by Adolphe Wahltuch, M.D. 8vo, 15s. [1868]

MATERIA MEDICA AND THERAPEUTICS:

(Vegetable Kingdom), by Charles D. F. Phillips, M.D., F.R.C.S.E. 8vo. 15s.

THE STUDENT'S GUIDE TO MATERIA MEDICA

by JOHN C. THOROWGOOD, M.D. Lond., Physician to the City of London Hospital for Diseases of the Chest. Fcap 8vo, with Engravings, 6s. 6d. [1874]

THE DISEASES OF CHILDREN

A Practical Manual, with a Formulary, by EDWARD ELLIS, M.D., Physician to the Victoria Hospital for Children. Second Edition, crown 8vo, 7s.

THE WASTING DISEASES OF CHILDREN

by Eustace Smith, M.D. Lond., Physician to the King of the Belgians, Physician to the East London Hospital for Children. Second Edition, post 8vo, 7s. 6d.

THE DISEASES OF CHILDREN

Essays by WILLIAM HENRY DAY, M.D., Physician to the Samaritan Hospital for Diseases of Women and Children. Fcap 8vo, 5s. [1873]

COMPENDIUM OF CHILDREN'S DISEASES

A Handbook for Practitioners and Students, by JOHANN STEINER, M.D., Professor of the Diseases of Children in the University of Prague. Translated from the Second German Edition by LAWSON TAIT, F.R.C.S., Surgeon to the Birmingham Hospital for Women. 8vo. 12s. 6d.

ADVICE TO A MOTHER

on the Management of her Children by PYE H. CHAVASSE, F.R.C.S. Eleventh Edition, fcap 8vo, 2s. 6d.

BY THE SAME AUTHOR,

ALSO.

COUNSEL TO A MOTHER

on the Care and Rearing of her Children, being the Companion Volume of 'Advice to a Mother.' Third Edition, fcap 8vo. 2s. 6d.

[1874]

*ADVICE TO A WIFE

on the Management of her own Health. With an Introductory Chapter especially addressed to a Young Wife. Tenth Edition, fcap 8vo, 2s. 6d.

PUERPERAL DISEASES

Clinical Lectures by FORDYCE BARKER, M.D., Obstetric Physician to Bellevue Hospital, New York. 8vo, 15s. [1874]

OBSTETRIC OPERATIONS.

including the Treatment of Hæmorrhage, and forming a Guide to the Management of Difficult Labour; Lectures by ROBERT BARNES, M.D., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery at, St. Thomas's Hospital. Second Edition, 8vo, with 113 Engravings, 15s.

[1871]

BY THE SAME AUTHOR,

MEDICAL AND SURGICAL DISEASES OF WOMEN

(a Clinical History). 8vo, with 169 Engravings, 28s.

[1873]

OBSTETRIC SURGERY

A Complete Handbook, giving Short Rules of Practice in every Emergency, from the Simplest to the most Formidable Operations connected with the Science of Obstetricy, by Charles Clay, Ext.L.R.C.P. Lond., L.R.C.S.E., late Senior Surgeon and Lecturer on Midwifery, St. Mary's Hospital, Manchester. Fcap 8vo, with 91 Engravings, 6s. 6d.

OBSTETRIC MEDICINE AND SURGERY

(Principles and Practice of) by F. H. RAMSBOTHAM, M.D., F.R.C.P. Fifth Edition, 8vo, with 120 Plates, 22s.

OBSTETRIC APHORISMS

for the Use of Students commencing Midwifery Practice by J. G. SWAYNE, M.D., Physician-Accoucheur to the Bristol General Hospital. Fifth Edition, fcap 8vo, with Engravings, 3s. 6d. [1971]

SCHROEDER'S MANUAL OF MIDWIFERY.

including the Pathology of Pregnancy and the Puerperal State. Translated by Charles H. Carter, B.A., M.D. 8vo, with Engravings, 12s. 6d.

A HANDBOOK OF UTERINE THERAPEUTICS

and of Diseases of Women by E. J. Tilt, M.D., M.R.C.P. Third Edition, post 8vo, 10s. [1868]

BY THE SAME AUTHOR.

THE CHANGE OF LIFE

in Health and Disease: a Practical Treatise on the Nervous and other Affections incidental to Women at the Decline of Life. Third Edition, 8vo, 10s. 6d.

ENGLISH MIDWIVES:

their History and Prospects, by J. H. AVELING, M.D., Physician to the Chelsea Hospital for Women, Examiner of Midwives for the Obstetrical Society of London. Crown 8vo, 5s.

DISEASES OF THE OVARIES:

their Diagnosis and Treatment, by T. SPENCER WELLS, F.R.C.S., Surgeon to the Queen's Household and to the Samaritan Hospital. 8vo, with about 150 Engravings, 21s. [1872]

HANDBOOK FOR NURSES FOR THE SICK

by Miss Veitch. Crown 8vo, 2s. 6d.

[1870]

A MANUAL FOR HOSPITAL NURSES

and others engaged in Attending on the Sick by EDWARD J. DOM-VILLE, L.R.C.P., M.R.C.S. Second Edition, crown 8vo, 2s. 6d. [1875]

A COMPENDIUM OF DOMESTIC MEDICINE

and Companion to the Medicine Chest; intended as a Source of Easy Reference for Clergymen, and for Families residing at a Distance from Professional Assistance, by JOHN SAVORY, M.S.A. Eighth Edition, 12mo, 5s.

THE WIFE'S DOMAIN

The Young Couple—The Mother—The Nurse—The Nursling, by PHI-LOTHALOS. Second Edition, post 8vo, 3s. 6d. [1874]

WINTER COUGH

(Catarrh, Bronchitis, Emphysema, Asthma), Lectures by HORACE DOBELL, M.D., Consulting Physician to the Royal Hospital for Diseases of the Chest. Third Edition, with Coloured Plates, 8vo, 10s. 6d. [1875]

BY THE SAME AUTHOR,

THE TRUE FIRST STAGE OF CONSUMPTION

(Lectures). Crown 8vo, 3s. 6d.

[1867]

DISEASES OF THE CHEST:

Contributions to their Clinical History, Pathology, and Treatment, by A. T. H. WATERS, M.D., F.R.C.P., Physician to the Liverpool Royal Infirmary. Second Edition, 8vo, with Plates, 15s. [1878]

PHTHISIS AND THE STETHOSCOPE;

or, the Physical Signs of Consumption, by R. P. COTTON, M.D., F.R.C.P., Senior Physician to the Hospital for Consumption, Brompton. Fourth Edition, fcap 8vo, 3s. 6d.

DISEASES OF THE HEART

and of the Lungs in Connexion therewith—Notes and Observations by Thomas Shapter, M.D., F.R.C.P. Lond., Senior Physician to the Devon and Exeter Hospital. 8vo, 7s. 6d. [1874]

VALVULAR DISEASE OF THE HEART

(some of its causes and effects). Croonian Lectures for 1865. By THOMAS B. PEACOCK, M.D., F.R.C.P., Physician to St. Thomas's Hospital. With Engravings, 8vo, 5s. [1865]

BY THE SAME AUTHOR,

MALFORMATIONS OF THE HUMAN HEART

With Original Cases and Illustrations. Second Edition, 8vo, with Plates, 10s. [1867]

THE ACTION AND SOUNDS OF THE HEART

Researches by George Paton, M.D., author of numerous papers published in the British and American Medical Journals. Resissue, with Appendix, 8vo, 3s. 6d.

NOTES ON ASTHMA:

its Forms and Treatment, by JOHN C. THOROWGOOD, M.D. Lond., Physician to the Hospital for Diseases of the Chest, Victoria Park. Second Edition, crown 8vo, 4s. 6d.

[1873]

GROWTHS IN THE LARYNX,

with Reports and an Analysis of 100 consecutive Cases treated since the Invention of the Laryngoscope by MORELL MACKENZIE, M.D. Lond., M.R.C.P., Physician to the Hospital for Diseases of the Throat. 8vo, with Coloured Plates, 12s. 6d.

BY THE SAME AUTHOR,

HOARSENESS, LOSS OF VOICE,

and Stridulous Breathing in relation to Nervo-Muscular Affections of the Larynx. Second Edition, 8vo, fully Illustrated, 3s. 6d. [1868]

ALSO.

THROAT HOSPITAL PHARMACOPŒIA,

containing upwards of 150 Formulæ. Second Edition, fcap 8vo. 2s. 6d. [1873]

IRRITATIVE DYSPEPSIA

and its Important Connection with Irritative Congestion of the Windpipe and with the Origin and Progress of Consumption by C. B. GARRETT, M.D. Crown 8vo, 2s. 6d.

MINERAL SPRINGS OF HARROGATE

By Dr. Kennion. Ninth Edition, revised and enlarged by Adam Bealey, M.A., M.D. Cantab., F.R.C.P. Lond. Crown 8vo, 1s. [1878]

SKETCH OF CANNES AND ITS CLIMATE

by Th. DE VALCOURT, M.D. Paris, Physician at Cannes. Second Edition, with Photographic View and 6 Meteorological Charts. Crown 8vo, 2s. 6d.

WINTER AND SPRING

on the Shores of the Mediterranean; or, the Genoese Rivieras, Italy, Spain, Greece, the Archipelago, Constantinople, Corsica, Sardinia, Sicily, Corfu, Malta, Tunis, Algeria, Smyrna, Asia Minor, with Biarritz and Arcachon, as Winter Climates. By Henry Bennet, M.D. Fifth Edition, post 8vo, with numerous Plates, Maps, and Engravings, 12s. 6d.

BY THE SAME AUTHOR.

TREATMENT OF PULMONARY CONSUMPTION

by Hygiene, Climate, and Medicine. Second Edition, 8vo, 5s. [1871]

EGYPT AS A HEALTH RESORT:

with Medical and other Hints for Travellers in Syria, by A. DUNBAR WALKER, M.D. Fcap 8vo, 3s. 6d. [1878]

FAMILY MEDICINE FOR INDIA

A Manual, by WILLIAM J. MOORE, M.D., Surgeon-Major H.M. Indian Medical Service. Published under the Authority of the Government of India. Post 8vo, with 57 Engravings, 8s. 6d. [1874]

DISEASES OF TROPICAL CLIMATES

and their Treatment: with Hints for the Preservation of Health in the Tropics, by JAMES A. HORTON, M.D., Surgeon-Major, Army Medical Department. Post 8vo, 12s. 6d.

HEALTH IN INDIA FOR BRITISH WOMEN

and on the Prevention of Disease in Tropical Climates by EDWARD J. TILT, M.D., Consulting Physician-Accoucheur to the Farringdon General Dispensary. Fourth Edition, crown 8vo, 5s. [1875]

BAZAAR MEDICINES OF INDIA

and Common Medical Plants: Remarks on their Uses, with Full Index of Diseases, indicating their Treatment by these and other Agents procurable throughout India, &c., by EDWARD J. WARING, M.D., F.R.C.P. Lond., Retired Surgeon H.M. Indian Army. Fcap 8vo, 4s.

SOME AFFECTIONS OF THE LIVER

and Intestinal Canal; with Remarks on Ague and its Sequelæ, Scurvy, Purpura, &c., by Stephen H. Ward, M.D. Lond., F.R.C.P., Physician to the Scamen's Hospital, Greenwich. 8vo, 7s. [1872]

DISEASES OF THE LIVER:

Lettsomian Lectures for 1872 by S. O. HABERSHON, M.D., F.R.C.P., Senior Physician to Guy's Hospital. Post 8vo, 3s. 6d. [1872]

THE STOMACH AND DUODENUM

Their Morbid States and their Relations to the Diseases of other Organs, by Samuel Fenwick, M.D., F.R.C.P., Assistant-Physician to the London Hospital. Svo, with 10 Plates, 12s. [1868]

CONSTIPATED BOWELS:

the Various Causes and the Different Means of Cure, by S. B. BIRCH, M.D., M.R.C.P. Third Edition, post 8vo, 3s. 6d.

FOOD AND DIETETICS

Physiologically and Therapeutically Considered. Second Edition, 8vo, 15s.

THE INDIGESTIONS;

or, Diseases of the Digestive Organs Functionally Treated, by T. K. Chambers, M.D., F.R.C.P., Lecturer on Medicine at St. Mary's Hospital. Second Edition, 8vo, 10s. 6d.

IMPERFECT DIGESTION:

its Causes and Treatment by ARTHUR LEARED, M.D., F.R.C.P., Senior Physician to the Great Northern Hospital. Fifth Edition, fcap 8vo, 4s. 6d.

THE ISSUE OF A SPIRIT RATION

during the Ashanti Campaign of 1874; with two Appendices containing Experiments to show the Relative Effects of Rum, Meat Extract and Coffee during Marching, and the Use of Oatmeal Drink during Labour, by EDMUND A. PARKES, M.D., F.R.S., Professor of Hygiene to the Army Medical School, Netley. 8vo, 2s. 6d.

MEGRIM. SICK-HEADACHE.

and some Allied Disorders: a Contribution to the Pathology of Nerve-Storms, by Edward Liveing, M.D. Cantab., Hon. Fellow of King's College, London. 8vo, with Coloured Plate, 15s.

IRRITABILITY:

Popular and Practical Sketches of Common Morbid States and Conditions bordering on Disease; with Hints for Management, Alleviation, and Cure, by James Morris, M.D. Lond. Crown 8vo, 4s. 6d.

[1868]

FUNCTIONAL NERVOUS DISORDERS

Studies by C. Handfield Jones, M.B., F.R.C.P., F.R.S., Physician to St. Mary's Hospital. Second Edition, 8vo, 18s. [1870]

NEURALGIA AND KINDRED DISEASES

of the Nervous System: their Nature, Causes, and Treatment, with a series of Cases, by John Chapman, M.D., M.R.C.P. 8vo, 14s. [1878]

THE SYMPATHETIC SYSTEM OF NERVES

and their Functions as a Physiological Basis for a Rational System of Therapeutics by EDWARD MERYON, M.D., F.R.C.P., Physician to the Hospital for Diseases of the Nervous System. 8vo, 3s. 6d. [1872]

GOUT, RHEUMATISM

and the Allied Affections; a Treatise by P. Hood, M.D. Crown 8vo, 10s. 6d.

RHEUMATIC GOUT,

or Chronic Rheumatic Arthritis of all the Joints; a Treatise by ROBERT ADAMS, M.D., M.R.I.A., Surgeon to H.M. the Queen in Ireland, Regius Professor of Surgery in the University of Dublin. Second Edition, 8vo, with Atlas of Plates, 21s.

TEMPERATURE OBSERVATIONS

containing (1) Temperature Variations in the Diseases of Children,.
(2) Puerperal Temperatures, (3) Infantile Temperatures in Health and Disease, by Wm. SQUIRE, M.R.C.P. Lond. 8vo, 5s.
[1871]:

MYCETOMA ;

or, the Fungus Disease of India, by H. VANDYKE CARTER, M.D., Surgeon-Major H.M. Indian Army. 4to, with 11 Coloured Plates, 42s.
[1874]

THE ORIGIN OF CANCER

considered with Reference to the Treatment of the Disease by CAMP-BELL DE MORGAN, F.R.S., F.R.C.S., Surgeon to the Middlesex Hospital. Crown 8vo, 3s. 6d.

CANCER:

its varieties, their Histology and Diagnosis, by Henry Arnott, F.R.C.S., Assistant-Surgeon to, and Lecturer on Morbid Anatomy at, St. Thomas's Hospital. 8vo, with 5 Plates and 22 Engravings, 5s. 6d.
[1872]

CANCEROUS AND OTHER INTRA-THORACIC GROWTHS:

their Natural History and Diagnosis, by J. RISDON BENNETT, M.D., F.R.C.P., Member of the General Medical Council. Post 8vo, with Plates, 8s.

CERTAIN FORMS OF CANCER

with a New and successful Mode of Treating it, to which is prefixed as Practical and Systematic Description of all the varieties of this Disease, by ALEX. MARSDEN, M.D., F.R.C.S.E., Consulting Surgeon to the Royal Free Hospital, and Senior Surgeon to the Cancer Hospital, London and Brompton. Second Edition, with Coloured Plates and Illustrative Cases, 8vo, 8s. 6d.

DISEASES OF THE SKIN:

a System of Cutaneous Medicine by Erasmus Wilson, F.R.C.S., F.R.S. Sixth Edition, 8vo, 18s., with Coloured Plates, 36s.

BY THE SAME AUTHOR,

LECTURES ON EKZEMA

and Ekzematous Affections: with an Introduction on the General Pathology of the Skin, and an Appendix of Essays and Cases. 8vo, 10s. 6d.

ALSO,

LECTURES ON DERMATOLOGY

delivered at the Royal College of Surgeons, 1870, 6s.; 1871-3, 10s. 6d.

ECZEMA

by McCall Anderson, M.D., Professor of Clinical Medicine in the University of Glasgow. Third Edition, 8vo, with Engravings, 7s. 6d.

BY THE SAME AUTHOR,

PARASITIC AFFECTIONS OF THE SKIN

Second Edition, 8vo, with Engravings, 7s. 6d.

[1868]

PSORIASIS OR LEPRA

by George Gaskoin, M.R.C.S., Surgeon to the British Hospital for Diseases of the Skin. 8vo, 5s. [1875]

DISEASES OF THE SKIN

in Twenty-four Letters on the Principles and Practice of Cutaneous Medicine, by Henry Evans Cauty, Surgeon to the Liverpool Dispensary for Diseases of the Skin, 8vo, 12s. 6d.

ULCERS AND CUTANEOUS DISEASES .

of the Lower Limbs, a Manual of their Pathology and Treatment, by J. K. Spender, M.D. Lond. 8vo, 4s.

FOURTEEN COLOURED PHOTOGRAPHS OF LEPROSY

as met with in the Straits Settlements, with Explanatory Notes by A. F. Anderson, M.D., Acting Colonial Surgeon, Singapore. 4to, 31s. 6d.

WORMS:

a Series of Lectures delivered at the Middlesex Hospital on Practical Helminthology by T. Spencer Cobbold, M.D., F.R.S. Post 8vo, 5s. [1873]

OXYGEN:

its Action, Use, and Value in the Treatment of Various Diseases otherwise Incurable or very Intractable, by S. B. BIRCH, M.D., M.R.C.P. Second Edition, post 8vo, 3s. 6d.

THE MEDICAL ADVISER IN LIFE ASSURANCE

by Edward Henry Sieveking, M.D., F.R.C.P., Physician to St. Mary's and the Lock Hospitals; Physician-Extraordinary to the Queen; Physician-in-Ordinary to the Prince of Wales, &c. Crown 8vo, 6s.

THE LAWS AFFECTING MEDICAL MEN

a Manual by ROBERT G. GLENN, LL.B., Barrister-at-Law; with a Chapter on Medical Etiquette by Dr. A. CARPENTER. 8vo, 14s.

[1871]

MEDICAL JURISPRUDENCE

(Principles and Practice of) by ALFRED S. TAYLOR, M.D., F.R.C.P., F.R.S. Second Edition, 2 vols., 8vo, with 189 Engravings, £1 11s. 6d.
[1873]

BY THE SAME AUTHOR,

ALSO.

A MANUAL OF MEDICAL JURISPRUDENCE

Ninth Edition. Crown 8vo, with Engravings. 14s.

[1874]

POISONS

in Relation to Medical Jurisprudence and Medicine. Third Edition, crown 8vo, with 104 Engravings, 16s.

A TOXICOLOGICAL CHART.

exhibiting at one View the Symptoms, Treatment, and mode of Detecting the various Poisons—Mineral, Vegetable, and Animal: with Concise Directions for the Treatment of Suspended Animation, by WILLIAM STOWE, M.R.C.S.E. Thirteenth Edition, 2s.; on roller, 5s.

MADNESS

in its Medical, Legal, and Social Aspects, Lectures by EDGAE SHEPPAED, M.D., M.R.C.P., Professor of Psychological Medicine in King's College; one of the Medical Superintendents of the Colney Hatch Lunatic Asylum. 8vo, 6s. 6d.

MENTAL DISEASES

Lectures by WILLIAM HENRY OCTAVIUS SANKEY, M.D. Lond., F.R.C.P., Lecturer on Mental Diseases at University College, London. 8vo, 8s. [1866]

HANDBOOK OF LAW AND LUNACY:

or, the Medical Practitioner's Complete Guide in all Matters relating to Lunacy Practice, by J. T. Sabben, M.D., and J. H. Balfour Browne, Barrister-at-Law. 8vo, 5s.

CEREBRIA

and other Diseases of the Brain by CHARLES ELAM, M.D., F.R.C.P., Assistant-Physician to the National Hospital for Paralysis and Epilepsy. Svo, 6s. [1872]

INFLUENCE OF THE MIND UPON THE BODY

in Health and Disease, Illustrations designed to elucidate the Action of the Imagination, by Daniel Hack Tuke, M.D., M.R.C.P. 8vo, 14s.

OBSCURE DISEASES OF THE BRAIN AND MIND

by Forbes Winslow, M.D., D.C.L. Oxon. Fourth Edition, post 8vo, 10s. 6d. [1868]

PSYCHOLOGICAL MEDICINE:

a Manual, containing the Lunacy Laws, the Nosology, Ætiology, Statistics, Description, Diagnosis, Pathology (including Morbid Histology), and Treatment of Insanity, by J. C. BUCKNILL, M.D., F.R.S., and D. H. TUKE, M.D. Third Edition, 8vo, with 10 Plates and 34 Engravings, 25s.

A MANUAL OF PRACTICAL HYGIENE

by E. A. PARKES, M.D., F.R.C.P., F.R.S., Professor of Hygiene in the Army Medical School. Fourth Edition, 8vo, with Plates and Engravings, 16s. (1872)

A HANDBOOK OF HYGIENE

for the Use of Sanitary Authorities and Health Officers by George Wilson, M.D. Edin., Medical Officer of Health for the Warwick Union of Sanitary Authorities. Second Edition, crown 8vo, with Engravings, 8s. 6d.

HANDBOOK OF MEDICAL ELECTRICITY

by HERBERT TIBBITS, M.D., M.R.C.P.E., Medical Superintendent of the National Hospital for the Paralysed and Epileptic. 8vo, with 64 Engravings, 6s. [1873]

CLINICAL USES OF ELECTRICITY

Lectures delivered at University College Hospital by J. RUSSELL-REYNOLDS, M.D. Lond., F.R.C.P., F.R.S., Professor of Medicine in University College. Second Edition, post 8vo, 3s. 6d.

[1873]

MEDICO-ELECTRIC APPARATUS

and How to Use it; or, a Practical Description of every Form of Medico-Electric Apparatus in Modern Use, with Plain Directions for Mounting, Charging, and Working, by T. P. Salt. 8vo, with 31 Engravings, 2s. 6d.

ATLAS OF OPHTHALMOSCOPY:

representing the Normal and Pathological Conditions of the Fundus Oculi as seen with the Ophthalmoscope: composed of 12 Chromolithographic Plates (containing 59 Figures), accompanied by an Explanatory Text by R. LIEBREICH, Ophthalmic Surgeon to St. Thomas's Hospital. Translated into English by H. ROSBOROUGH SWANZY, M.B. Dub. Second Edition, 4to, £1 10s.

DISEASES OF THE EYE

a Manual by C. Macnamara, Surgeon to the Calcutta Ophthalmic Hospital Second Edition, fcap 8vo, with Coloured Plates, 12s. 6d. [1872)

AUTOBIOGRAPHICAL RECOLLECTIONS

of the Medical Profession, being personal reminiscences of many distinguished Medical Men during the last forty years, by J. Feenmandez Clarke, M.R.C.S., for many years on the Editorial Staff of the 'Lancet,' Post 8vo, 10s. 6d.

A DICTIONARY OF MEDICAL SCIENCE

containing a concise explanation of the various subjects and terms of Anatomy, Physiology, Pathology, Hygiene, Therapeutics, Medical Chemistry, Pharmacology, Pharmacy, Surgery, Obstetrics, Medical Jurisprudence and Dentistry; Notices of Climate and Mineral Waters; formulæ for Officinal, Empirical, and Dietetic Preparations; with the Accentuation and Etymology of the terms and the French and other Synonyms, by Robley Dunglison, M.D., LL.D. New Edition, by Richard J. Dunglison, M.D. Royal 8vo, 28s.

A MEDICAL VOCABULARY;

being an Explanation of all Terms and Phrases used in the various Departments of Medical Science and Practice, giving their derivation, meaning, application, and pronunciation, by ROBERT G. MAYNE, M.D., LL.D. Fourth Edition, fcap 8vo, 10s.

OPHTHALMIC MEDICINE AND SURGERY

a Manual by T. Whaeton Jones, F.R.S., Professor of Ophthalmic Medicine and Surgery in University College. Third Edition, fcap 8vo, with 9 Coloured Plates and 173 Engravings, 12s. 6d.

DISEASES OF THE EYE

A Treatise by J. SOELBERG WELLS, F.R.C.S., Ophthalmic Surgeon to King's College Hospital and Surgeon to the Royal London Ophthalmic Hospital. Third Edition, 8vo, with Coloured Plates and Engravings, 25s.

BY THE SAME AUTHOR,

LONG, SHORT, AND WEAK SIGHT.

and their Treatment by the Scientific use of Spectacles. Fourth Edition, 8vo, 6s. [1873]

DISEASES OF THE EYE

A Practical Treatise by HAYNES WALTON, F.R.C.S., Surgeon to St. Mary's Hospital and in charge of its Ophthalmological Department. Third Edition, 8vo, with 3 Plates and nearly 300 Engravings, 25s.

DISEASES OF THE EYE

Illustrations of, with an Account of their Symptoms, Pathology, and Treatment, by Henry Power, F.R.C.S., M.B. Lond., Ophthalmic Surgeon to St. Bartholomew's Hospital. 8vo, with 12 Coloured Plates, 20s.

A SYSTEM OF DENTAL SURGERY

by John Tomes, F.R.S., and Charles S. Tomes, M.A., Lecturer on Dental Anatomy and Physiology, and Assistant Dental Surgeon to the Dental Hospital of London. Second Edition, fcap 8vo, with 268 Engravings, 14s.

A MANUAL OF DENTAL MECHANICS

with an Account of the Materials and Appliances used in Mechanical Dentistry, by Oakley Coles, L.D.S., R.C.S., Surgeon-Dentist to the Hospital for Diseases of the Throat. Crown 8vo, with 140 Engravings, 7s. 6d.

HANDBOOK OF DENTAL ANATOMY

and Surgery for the use of Students and Practitioners by JOHN SMITH, M.D., F.R.S. Edin., Surgeon-Dentist to the Queen in Scotland. Second Edition, fcap 8vo, 4s. 6d.

[1871]

EPIDEMIOLOGY:

or, the Remote Cause of Epidemic Diseases in the Animal and in the Vegetable Creation, by JOHN PARKIN, M.D., F.R.C.S. Part I, 8vo, 5s.

GERMINAL MATTER AND THE CONTACT THEORY:

an Essay on the Morbid Poisons by JAMES MORRIS, M.D. Lond. Second Edition, crown 8vo, 4s. 6d. [1867]

DISEASE GERMS:

and on the Treatment of the Feverish State, by Lionel S. Beale, M.B., F.R.C.P., F.R.S., Physician to King's College Hospital. Second Edition, crown 8vo, with 28 Plates, 12s. 6d.

THE GRAFT THEORY OF DISEASE

being an Application of Mr. DARWIN'S Hypothesis of Pangenesis to the Explanation of the Phenomena of the Zymotic Diseases, by James Ross, M.D. 8vo, 10s.

ZYMOTIC DISEASES:

their Correlation and Causation by A. Wolff, F.R.C.S. Post 8vo, 5s.

The following CATALOGUES issued by Messrs Churchill will be forwarded post free on application:

- 1. Messrs Churchill's General List of nearly 600 works on Medicine, Surgery, Midwifery, Materia Medica, Hygiene, Anatomy, Physiology, Chemistry, &c., &c., with a complete Index to their Titles, for easy reference.
 - N.B.—This List includes Nos. 2 and 3.
- 2. Selection from Messrs Churchill's General List, comprising all recent Works published by them on the Art and Science of Medicine.
- 3. A descriptive List of Messrs Churchill's Works on Chemistry, Pharmacy, Botany, Photography, Zoology, and other branches of Science.
- 4. Messrs Churchill's Red-Letter List, giving the Titles of forthcoming New Works and New Editions.

[Published every October.]

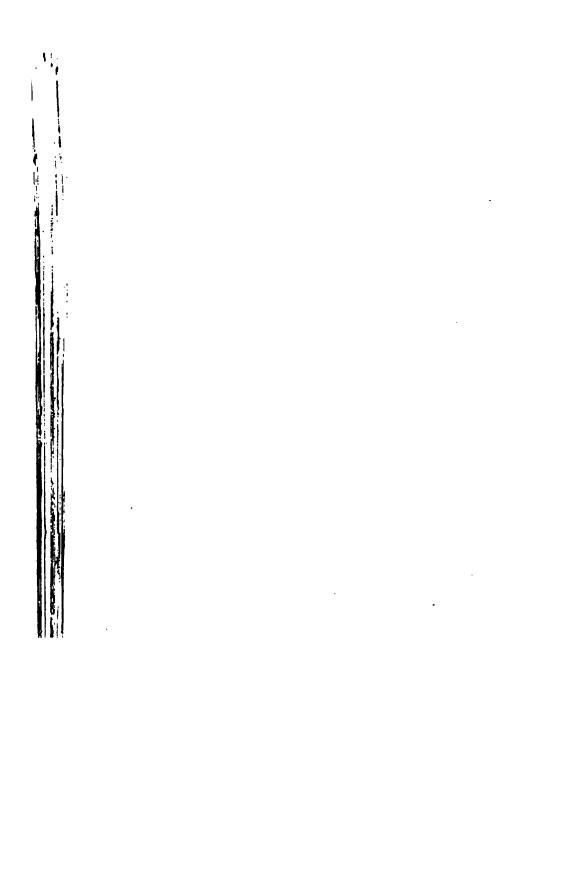
5. The Medical Intelligencer, an Annual List of New Works and New Editions published by Messrs J. & A. Churchill, together with Particulars of the Periodicals issued from their House.

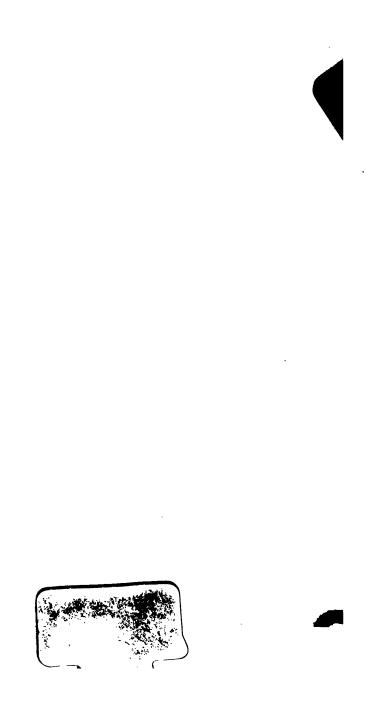
[Sent in January of each year to every Medical Practitioner in the United Kingdom whose name and address can be ascertained.

A large number are also sent to the United States of America, Continental Europe, India, and the Colonies.]

MESSES CHURCHILL have a special arrangement with MESSES LINDSAY & BLAKISTON, of PHILADELPHIA, in accordance with which that Firm act as their Agents for the United States of America, either keeping in Stock most of Messes Churchill's Books, or reprinting them on Terms advantageous to Authors. Many of the Works in this Catalogue may therefore be easily obtained in America.

• 4 .





.

